PRACTICAL TREATISE

ON THE

DISEASES OF THE SKIN,

ARRANGED WITH

A VIEW TO THEIR CONSTITUTIONAL CAUSES
AND LOCAL CHARACTERS:

AND

INCLUDING THE SUBSTANCE OF THE ESSAY ON THESE SUBJECTS TO WHICH THE ROYAL COLLEGE OF SURGEONS AWARDED THE JACKSONIAN PRIZE.

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PREFACE.

In the disposition of the subjects of the following pages, I have endeavoured to obviate inconveniences which have been complained of in classifications founded merely on local characters; and though it would be almost impossible so to construct an arrangement as completely to comprehend both these and constitutional causes under precise definitions, I think that in a large proportion of the divisions which I have instituted, a step of some importance towards this point has been achieved. In the arrangement of the substance of the work I have found it of much utility, both as regards the convenience of description and the conciseness which it

was desirable to observe, in order to escape the imputation which has been incurred by other authors on these subjects, of introducing unnecessary and useless matter.

Viewing the study of cutaneous diseases as in its infancy, for I am not disposed to admit that the inquiries and researches of Dr. Willan among the writings of ancient authors have elicited much useful information, it has appeared a point of no small importance to steer as widely as possible of those numerous divisions into species where slight variations only exist, and those endless distinctions without real differences, which have originated with him, as being calculated to discourage the student rather than promote the knowledge of the subject. Perspicuity, the object chiefly in view in the classification I have adopted, is also much contributed to by this step, while no useful fact is forgotten, or any important principle of treatment overlooked. I have endeavoured, notwithstand-

ing, to point out the foundations on which the distinctions in question have been raised, as well as the causes of such trifling variations as have appeared to others to render them necessary. Abbreviation of remark, so far as it could be observed without the sacrifice of any important consideration, and an arrangement of the engravings calculated to convey clear ideas of the different diseases in one plate, have been had recourse to, with a view to escape a serious obstacle to the propagation of the knowledge of these subjects, among persons whose pecuniary means of obtaining information are at all limited.

After the remarks on the anatomy and physiology of the skin, contained in the first sheet of the first edition of the following work, had been sent to press, Mr. Chevalier published his Lectures on these subjects, delivered before the College of Surgeons; and I cannot omit to notice a few remarks contained in that publication, because they

are connected with, and militate somewhat against, the pathology of certain diseases of the cutaneous structure which I have endeavoured to establish at the expense of much time and attentive observation.

It is generally admitted, that in the use of microscopic instruments, deceptive appearances have been often made the groundwork of fallacious theories and descriptions, and sometimes even of notions so fantastical and extravagant, as to bring down the shafts of satire and ridicule on a science dignified by the strongest claims to the respect and gratitude of mankind. It is not at present certain to what extent a magnifying apparatus of extraordinary power can be depended on for conveying correct impressions; and hence, in the perusal of observations stated to have been made by such means, we are naturally compelled to exercise more distrust than as regards such as have been made by the unassisted sense.

Mr. C., by the use of such means, thought he had discovered a distribution of glands between the cuticle and rete mucosum, or, as he prefers designating this structure, the second epidermis, as well as a second order of the same kind between the latter and the cutis. If the first of these really exist, the merit of the discovery is unquestionably his; but having, at the same time, pointed out the second arrangement alluded to under the rete mucosum, it seems difficult to form a conjecture as to the utility of the first. They are denominated, with the intention of conveying an idea of their offices, sebaceous or ceraceous glands.

While, however, such descriptions have been given, of parts hitherto not known to exist, it is singular, that an apparatus obvious to the naked eye, and performing a most important part of the offices vested in the skin, on the proper discharge of the duties of which the glossy shining appearance of the latter

in health entirely depends, while on its derangement a varied form of disease immediately makes its appearance, has obtained but little attention. This apparatus has been described in the first sheet of the following production, under the name of sebaceous follicles; and notwithstanding the description of the glands in question, I am still of opinion that these follicles are the only organs producing sebaceous matter. Nor is it difficult, with such a view of the subject, to understand the real nature of those little white pearly prominences described by Mr. C. as glands, and illustrated by a preparation deposited in the College Museum. These appearances are familiar to every one, as occurring on and about the tip and alæ of the nose in young infants, in considerable numbers, and I have described them in adults, in the following work, under the head of Acne. They have always appeared to me to be *concretions of sebaceous matter on the mouths of the follicles*, retained in that situation by the cuticle: the

latter being at these precise points impervious. Of course the cuticle peels off on maceration, leaving them undisturbed, and this is the fact which the preparation I have alluded to shows in a most unequivocal manner. Many of these specks are already detached and floating loose in the spirit, which is an occurrence that would not have so soon taken place, had they been what he supposed.

Another assertion, regarding the origin of the hair, appears to me equally demanding some comment. It would be superfluous to observe, that I am not actuated by a spirit of criticism, merely, in such remarks as I may offer; for on this point it necessarily happens that if the opinions he entertained were correct, a different one long since published by me, and which I have been accustomed to consider subsequent observation as constantly confirming, must be erroneous. It does not require any argument to prove that the hair does *not*, as Mr. C. asserted, "grow from small bulbs imbedded in the surface of the corium:"

for the fact of its origin below the *inner surface* of this structure is rendered sufficiently evident by a very simple procedure, which I have described in the preliminary remarks to this treatise *; and is furthermore amply illustrated by several preparations made by Mr. Hunter, now in the College Museum. The reader will readily see the necessity of this observation, from its intimate connexion with the pathology of several important cutaneous diseases.

On the subject of the existence of the rete mucosum, as a membrane, Mr. C.'s opinions are opposed to those of the authors to whom I have alluded in the first page of the following treatise, and also to those of Bichat and other distinguished anatomists; but as no reason exists for importantly connecting this substance with any cutaneous disease, it does not, in this place, form a proper subject for further remark.

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* Page 10.

With reference more particularly to the subject of the arrangement of the diseases of the skin which I have adopted, and to the deviation I have made from the course of other authors respecting it, it is proper to observe, that I do not claim for it any high degree of credit from the admirers of nosology, and shall be content to hear from practical men an accordance of opinion with my own, if only to the extent that it tends to simplify the subject to the student, and thereby render successful treatment more common.

It need not be observed, that the successful treatment of disease must be the main and final object of nosology, and all other branches and minute divisions of medical science; and this being admitted as regards the cases of diseases of the skin (so large a portion of which have a constitutional origin and connexion), that arrangement which identifies any particular disease with certain constitutional causes or conditions must be allowed

to be the best, because it directs us at once to the remedy.

The orders and divisions of Willan, Bateman, Rayer, Alibert, &c., may be allowed the merit of bringing the external features of the different diseases to the mind in lively characters, and they may carry us, as in Willan's, from the vesicles of chicken pox to the Herpes zoster or shingles, from this again to Rupia, from Rupia to Eczema, including that form or degree of it which mercury only, through its operation on the system, is capable of producing, and from this again to the common thrush. Where is the connecting link to be found, if the constitution is considered, between chicken pox and shingles? Where that between shingles (which invariably makes its appearance under circumstances which prove it to be of a salutary nature to the constitution) and Rupia, a disease which never appears except in the most debilitated states of system? Where that between Rupia and the miliary eruption of the skin produced by exposure to

excessive heat and warm covering, or what, in less enlightened times, was called miliary fever? The thrush of infants is included in this order (vesiculæ) with the foregoing diseases. Where can be the utility of placing it in such company as the Eczema mercuriale and Rupia?

Purpura again is placed with measles and scarlet fever, under the order Exanthemata; Impetigo and small pox, under the order Pustulæ; and yet the only road to the successful conduct or treatment of most of them is through the medium of the constitution.

Rayer* has almost implicitly followed Willan's classification. and declares it to be superior to that of Alibert, the most distinguished of French authors on this subject. English readers will probably be of his opinion, for the "Dartres" of Alibert comprehend the different forms of Pityriasis, Psoriasis, Prurigo,

* Maladies de la Peau, recently published in Paris.

Porrigo favosa, Ichthyosis, Rupia, Herpes, Lupus, Acne and Sycosis, Urticaria, &c. &c.!

The propensity to diffuseness so marked in the works of Willan, has been imitated by the French authors * above named, and the *observations* or cases of the latter occupy as large a proportion of their published volumes as the researches of Willan among ancient authors do of that which he lived to furnish us with.

The practical utility of either is extremely questionable. The value of details of cases

* Diseases of the skin may be multiplied *ad infinitum*; thus Rayer has his Congestions Sanguines, the cyanose or blue disease, the appearance well known as the consequence of malformation of the heart, under the same head with Purpura, Petechiæ, &c. Shortly after follows Alterations de la Couleur de la Peau, in which appears the Leucopathie or the white skin of the Albinos. The chlorose, or that unhealthy appearance of the complexion occurring in delicate females suffering from irregular or obstructed menstruation; freckles, and the discoloration produced by nitrate of silver, come in regular course, complete, and help to increase the bulk of his work.

of skin disease, where every thing is distinguishable to the naked eye, is by no means equal to those regarding internal affections; and to enable us to estimate the value of Willan's researches among books, it is only necessary to read that part of the work published before his death. It is not unfair to assert, that not a single valuable practical fact can be culled from them.

The inconveniences of such a system are twofold: it entails on the industrious student a great deal of labour in his efforts to select the grain from the chaff, while it adds seriously to the expense of the book.

Willan, notwithstanding these deficiencies, may claim the pre-eminent merit of having led the attention of medical men of the present day to the study of cutaneous diseases. I have it from good authority, that his first publication was in the possession of the most distinguished of French writers on this

subject a very considerable length of time before the latter had embarked, or possibly even conceived the project of his splendid plates and descriptions; and many parts of the latter certainly bear a striking, though unacknowledged, similarity to those of Willan.

Willan found the study of cutaneous diseases an uncultivated field, and directed all the energies of a powerful mind to its cultivation. It became his adopted child, and like a fond parent he nurtured it up, and gave it the character and importance his fancy and affection dictated. What a monster he would have made it, the part which he completed during his lifetime will give us an idea of. It is clear that he would have placed it beyond the reach of the mass of the profession, by his voluminous details and expensive illustrations.

My present object has been to offer, in the cheapest form, the best practical information; and I do not believe that the value of con-

cise and clear description, which costs little to the reader, is excelled by professed engraved representations, however well executed. If an accurate description be attentively read, the powers of the artist, in the present state of the art, will not be so highly valued as they have hitherto been.

It will be perceived that I have omitted some diseases, which have hitherto been considered as properly forming a part of cutaneous pathology. Small-pox, measles, scarlatina, and varicella, have obtained elaborate notice from different authors of established reputation elsewhere; and were it otherwise, the cutaneous affection does not call for, or admit of, interference.

Erysipelas, also, though it has been considered and treated as a cutaneous disease, is by no means classed with propriety among diseases, the mass of which so unfrequently involve the life of the patient. It is not

confined to inflammation of the cutis, even in the most trifling cases, but occupies the cellular membrane beneath to a considerable extent and depth, as well as other deep seated structures. It is moreover a matter of great uncertainty, whether the cutis is primarily affected, or whether the mischief fails to be rendered manifest in the substance of this structure, till long after inflammation has been established in the parts beneath.

Elephantiasis, also, which is a disease distinctly originating in the cellular membrane, I have excluded, for the same reason as erysipelas. The molluscum, of which Dr. Bateman has furnished a plate, is, as I am informed, an affection of which no other instance has been recorded; its history and pathology, therefore, have received no additions since the publication alluded to.

I have omitted the consideration of the various congenital malformations of parts of

the cutis denominated nevi materni, partly because they cannot be considered with propriety as diseases of this structure, and partly because those only which are capable of improvement by medicinal management, or require removal by surgical interference, have obtained the notice of the first surgical authorities. I am not aware that any thing has been added to the information contained in the works of Mr. Abernethy * and Mr. John Bell †, as to the best method of treatment of such cases as have been termed by the latter aneurism by anastomosis, and which constitute by far the larger portion of those to which the attention of the surgeon is required to be directed.

With these remarks the work is again submitted to the public, with, it is hoped, a well

* Abernethy's Surgical Works, vol. ii.

† Principles of Surgery, vol. i.

grounded confidence that it has undergone some improvements. It is fearlessly, but respectfully, submitted again to the comments of the candid and judicious, though not without some feelings of gratitude for the liberality which it received from them on its first appearance. With such commentators the author has no reason to be dissatisfied, and it became a matter of surprise to him, that the same volume which conveyed to him the opinions of the scientific and the liberal, should have also been the organ of information, that he had been attacked by the ignorant and malevolent*. He has some apprehensions whether even this notice of the extraordinary fact alluded to will meet with the approbation of the wise and the good; but he is, perhaps,

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* "We have received some severe strictures on Mr. Plumbe's work from more than one or two *anonymous* sources. But of these we shall not avail ourselves, as *most of them bear the impress of the detestable odium medicum, the disgrace of the profession.*"—*Editor of the Medico-Chirurgical Review for January*, 1825.

too ardent a subscriber to that moral axiom, which teaches us to think the anonymous attacks of the malevolent testimonials inferior only in value to the open commendations of the scientific and the candid.

65, Great Russell-street,
August 5, 1827.

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ERRATUM.

In page 107, line 8, *dele* "even."

DESCRIPTION OF PLATES.

PLATE I.



DIVISION I.

Fig. 1.—The upper part of this cluster of figures is intended to represent the uninflamed follicle; the lower the commencement and progress of inflammation, and its termination in the formation of matter.—2. The enlarged and indurated tubercles (A. indurata), with matter formed in their centre, which occur in bad constitutions.—3. Inflamed and suppurated follicles, forming sycosis on the beard.—4. The appearance of spots of Porrigo scutulata, where no fluid secretion or scab has been formed.—5. The partially denuded scalp of long established cases of the latter, where scabs have been allowed to accumulate, and where great irritation prevails, the remaining hairs insulated by pustules.

DIVISION II.

Fig. 20.—The two inferior spots representing the first appearance of the spots of Lepra before the first scale separates. The superior, large, round, and scaly; the disease in a spreading state.—21. Psoriasis.—22. An enlarged representation of the morbid and discoloured cuticle forming Ichthyosis. The numberless fissures caused by the cracking of this hard, dry substance, and dividing it into thousands of pieces, are well represented. It is introduced here out of its proper place, it being the only subject of the 6th division worthy of representation.

DIVISION III.

FIG. 11.—Porrigo favosa.—12. P. larvalis, both from cases of considerable standing.—13. The pimples of infants, some of them surrounded by considerable inflammation; their representation in clusters connected by patches of inflamed skin (S. intertinctus, &c.) has been omitted.—14 and 15. The pimples of adults, termed Lichen; the first of these, as it sometimes occurs on the arms and other parts covered by the finer kind of hair, each hair occupying the centre of a pimple: the second as it appears on other parts.—16. The pimples of Prurigo, the tops of some of them scratched off, leaving a peculiar little, black, bloody scab on their apices.—17. Two of the commoner forms of Urticaria.—18. The vesicles of Herpes in an advanced and partly flaccid state.—19. The carbuncular Furuncle.

DIVISION IV.

FIG. 23.—The inferior portion exhibiting an enlarged view of the vesicles of Impetigo. The superior, the disease in an advanced stage, with the scab partially covering it.—24. The vesicles and enlarged pustules of the itch.—25. The appearance of the skin in Eczema mercuriale.—26. The tubercle of Erythema nodosum.

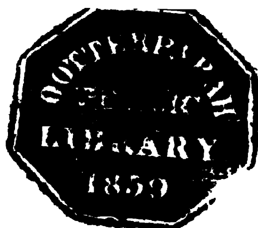
DIVISION V.

FIG. 6.—Petechiæ, or Purpura simplex.—7. The enlarged spots of Purpura hemorrhagica.—8. Different stages or degrees of the Ecthymatous eruption.—9. The conical scabs of Rupia. The similarity of character between the two latter is rendered very distinct.—10. Pompholyx. The superior vesicle discoloured by the admixture of blood from the vessels of the surface.

N. B. It has been considered that a more systematic appearance would result from the transposition of some of the sections of the first edition, and the order of the plate has been changed in accordance with it.

PLATE II.

The changes produced on the scalp in long established cases of Porrigo have been attempted to be represented in this plate. The adipose structure described as secreting the hair undergoes a considerable diminution or wasting, as the effect of the ceaseless irritation and discharge from the surface of the scalp, while the hair is for the most part extirpated; small tufts here and there distributed over the diseased surface only remain, and these are observed to have pustules among them. The diseased skin covering the wasted adipose structure appears to the touch to have nothing between it and the pericranium; and the greater degree of thickness of the healthy skin along the superior line of margin of the disease presents the appearance of a sudden declivity or depression. This wasting, however, is not permanent; and as the irritation on the surface is subdued by the plan detailed in the preceding pages, and the remaining hair removed, the skin gradually, except where deep ulceration has occurred, re-assumes its original solidity and thickness, and the new hair begins to make its appearance.



PRELIMINARY REMARKS

ON THE

ANATOMY AND PHYSIOLOGY OF THE SKIN.

The absence of due consideration of the anatomy and physiology of the skin, which a large portion of those who have written on the subject of cutaneous diseases have manifested, as well in their descriptions as methods of treatment, will, it is hoped, afford ample excuse for introducing a work of this nature with the following remarks.

The most distinguished authors on dermoid pathology, have boldly fixed the seat of important and obstinate diseases in parts of the skin denied by equally distinguished anatomists to have any existence in reality *; while

* Alibert and others have stated the seat of Tinea to be in the rete mucosum, a structure which Mr. Lawrence and many other anatomists have been unable to find in the white subject, and which Dr. Gordon denies the existence of, except in blacks. Many fruitless attempts to show it have been made by myself, and by others of more practical

whole pages have been wasted in the description of affections obviously consequent on derangement of a well known function of the skin, without the slightest reference to such function, or the part of the skin on which it depends. Hence, methods of treatment have been adopted destitute of sound principles, and productive of nothing but mischief; while principles have been overlooked which would have pointed out methods of treatment as efficient as simple, and utterly incapable of any deleterious influence. Always excepting due regard to those universal agents in the production and modification of local diseases, disordered states of the organs of digestion *, there is nothing affords so fair a promise of

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tact in such pursuits at my request. A membranous film corresponding with the descriptions which have been given of it, has been found after death in many cases where inflammation of the true skin had preceded, or accompanied the fatal disorder. In some instances this film has been preserved, and continues to be exhibited as the rete mucosum.

* That the skin should be susceptible of the slightest deviation from health in the action of internal organs, is not surprising. It is a most important emunctory, and the chief office of these is to keep up the balance between the ingesta and egesta: hence, the effects upon it of disordered stomach, impeded biliary and urinary secretion, &c., if more blood is sent to it, or its usual supply abstracted in consequence of such disorders it suffers. Dr. Jackson's Dermato Pathologia.

improvement in the management of cutaneous affections, as a due regard to the anatomy and different functions of the skin. A careful reference to these will be found the only road to a principle of treatment of many affections of this structure, and these not the least unpleasant and unsightly which come under our notice; while it is calculated to disclose important facts in the history and character of others, which have been hitherto entirely overlooked.

The skin has been usually described, since the time of Malpighi, as consisting of three parts or layers of differently formed structures; the cuticle, cutis, and an intermediate thin web-like membrane, which this anatomist thought he had discovered, the corpus or rete mucosum. The latter has been described, though not satisfactorily demonstrated by succeeding anatomists, up to the present period. If it really exists as an independent structure, it probably partakes of the derangement of the cuticle and cutis in the majority of skin diseases; but as far as I have been able to observe, the history of none of these furnish facts calculated to clear up the doubts on this point which have been entertained.

Of the cuticle, an insensible structure, ex-

tended with different degrees of thickness over every part of the surface of the body, it is unnecessary to say much. To describe it with a great deal of minuteness would be superfluous, since the only object in view is to point out the connexion which it may have with certain cutaneous diseases. We may briefly remark, that it is the production of the superficial vessels of the cutis or true skin, and that its chief office is to protect the delicate and highly sensible surface of the latter. It is perforated, for the purpose of giving exit to the secretion of the sebaceous follicles of the true skin, and obtains a glossy shining appearance of surface from this substance being spread over it. It has long been supposed to have pores by which the perspiration found its way to the surface; it is probable, however, that the anatomist who first described these, mistook the orifices made by the hairs, or those which were adapted to the mouths of the sebaceous follicles for such. Mr. Chevalier describes "an infinite number of minute velamina regularly arranged, of exquisite tenuity, presenting a follicular appearance, and separated from each other by bands of a thicker substance, crossing and intersecting them, so as to render them distinct." He thinks that "the terminal vessels of the cu-

taneous apparatus are lodged in these velamina, and that so long as the vessels maintain a vital connexion with them they transmit their secretion through them, as through a bibulous and exquisitely hygrometrical covering, of the finest delicacy and perfection; while, through the same medium, and dependent on subjacent tubes, taking a contrary course inward, absorption is carried on to a great but less certain extent and continuity."

Under circumstances of disease, the cuticle furnishes an external distinguishing character to many cutaneous affections. In health, it is observed merely to throw off at intervals slight scurfy exfoliations, so trifling in extent as rarely to attract much notice, if cleanliness be observed; while different degrees of morbidly increased action of the vessels producing it, form the points of distinction between the genera of the whole order Squamæ of Willan, from common dandriff to the fish-skin disease.

The cutis, on the vascular energies of which the production and nourishment of the cuticle depends, besides its more obvious and general offices as a covering to other parts, and as the structure effecting the separation of the perspirable matter from the mass of blood, gives in different parts of the body a seat to a most important structural arrangement, on the dis-

order of which some of the most obstinate cutaneous affections are found to depend:—the sebaceous follicles. These follicles are minute thimble-formed cavities in the substance of the cutis, with their mouths opening on its surface. The larger kind are most numerously distributed over parts much exposed, and where flexures of the skin are formed: the secretion poured out in the former instance probably forming a defence to the cuticle, under exposure to heat; and in the latter, operating to prevent the consequences of attrition. They are most easily distinguishable about the nose and mouth in men, as well as in females; but in the latter, they are also often seen in great numbers on the neck and upper parts of the chest: their secretion, which is entirely supplied by the vessels of the cutis, gives an agreeably smooth and glossy appearance to the skin of these parts where their dimensions and number are not very considerable; but where the reverse is the case, the secretion at their orifices becomes discoloured, forming so many minute black spots, which much disfigures the skin, and gives it a dingy, unhealthy appearance.

The existence of papillæ on any part of the body, except those wherein the senses of taste and touch reside, and where their utility is obvious, as giving a much greater field for

the extension of the nerves of such senses, and increasing their acuteness, may reasonably be doubted. "Much that has been written and delineated respecting them is very confused, one might almost say imaginary, or perhaps has arisen from optical deception in examinations with incorrect glasses." I have never been able, by any glasses which could be depended on, to discover any vestige of them: it is needless to add, that that pathology which has been given us of the formation of papulæ or pimples, is incorrect *, since every genus of this order makes its appearance on all parts of the body at times, *except* where papillæ are really and easily found.

Another point in the anatomy of the skin, which importantly regards some cutaneous affections, relates to the origin and growth of the hair. On the absence of reflection on this part of my subject, I am led to believe the opinion of the obstinate and almost incurable character of some of the species of porrigo, has been entirely raised; since, by constantly bearing in mind the following

* Papulæ, or pimples, appear to originate in an inflammation of the papillæ of the skin, by which these are enlarged, elevated, and indurated. Bateman's Synopsis.

facts, and the application of a few common and well-known surgical principles, to be hereafter more particularly alluded to, these diseases are now easily subdued.

In the consideration of the structure and peculiarities of the scalp as connected with the diseases of this part, I am not unaware that I have been preceded in some of the opinions I have to give, some time since: and that by an author, who evinces more of the spirit of reasoning, likely to lead to good results, as regards the management of cutaneous diseases generally, than most others whom I have been led to consult *. An anatomical description of these parts has been given in the work to which I allude, which appears to be sufficiently minute to answer the purpose for which it was intended; but as a difference of opinion exists between the author and myself on some essential points regarding the pathology of the disease on which he has written, I shall take leave to offer another, somewhat more minute, but necessary to the understanding of the true characters of such disease, and the causes of its usual obstinacy.

* Cooke on Ringworm.

The greater degree of thickness and density of the scalp and other parts covered by the stronger kind of hair, would lead us, *a priori*, to suspect that they had other offices to perform beyond those of the skin in other parts of the body. Did it not appear that the cutis, in such parts, had no connexion with the bulbous roots of the hair, we should probably assign to it, as others have done, part of the office of producing and nourishing the latter: there can be no doubt, however, that the hairs have their origin completely beneath the under surface of the cutis, and derive their support immediately from the adipose membrane here disposed, and apparently having a particular arrangement for this purpose.

The layer of adipose membrane, extended with different degrees of thickness on the inner surface of the cutis on different parts of the body, assumes under the scalp a material change of character. It is closely attached to the cutis, and on superficial examination, appears partially interwoven with the inner surface of this covering. It is firmly attached also to the bulbs of the hair, which seem to be implanted in it.

The loose reticular membrane distributed on the head between this structure and the

pericranium appears to answer a purpose, with respect to it, very similar to one of those of the pia mater with the brain; and if the minuteness of the dissection does not deceive us, it sends off processes which dip down into, and divide the adipose structure into portions having a rounded capsular form; in the centre of each of which, three, four, or more hairs, appear to originate. Be this as it may, however, the origin of the hair in this structure, and its complete independence of the cutis, as regards its nourishment, is made sufficiently obvious, by an incision of a portion of the scalp previously removed from the head, just through the dense structure of the cutis, and the turning one portion back on the other.

The cutis, therefore, a vascular and highly sensible structure, is penetrated by the hair, which does not, as far as the most minute injections, with the help of glasses, can show, receive any contribution of vessels for the purposes of nourishment from it.

If there is any analogy between the structure of the human hair, and that of the larger species of animals, the oleaginous secretion covering it, and giving to it its smooth and glossy appearance, is also derived from the adipose structure alluded to beneath the cutis; this

fluid being conveyed along the centre of the hair by tubes which originate in the bulb.

From a little above the bulb, as it passes up through the scalp, each hair is seen to receive an opake membranous covering, forming a kind of sheath; which sheath can be easily traced to the surface of the scalp, and a little above it; appearing at this part as if formed by a process sent off from the cuticle. In minutely injected preparations, vessels may be seen passing on these sheaths, and originating in the adipose capsules, having no other obvious use than the support of the sheath and the hair it contains.

The fact that the scalp is pierced by the hair, and has little or no share in its production or nourishment, I am particularly desirous of impressing upon the attention of my readers. Reasoning from analogy, we should be justified by this observation, in concluding that the latter *may* possess, when the former is in a state of disease, all the properties of extraneous substances. As regards the history of porrigo on this part, it will be uniformly found evincing these characteristics in the mildest as well as most severe forms of the disease. Porrigo, indeed, in all its varieties, affords ample proof of the utility of searching for the causes of peculiar obstinacy

of disease, in those circumstances which we know to be peculiar to the part in which such disease occurs.

From the foregoing statement, no doubt will be entertained of the correctness of the opinion of an author to whom I have already alluded, "that the vessels which form the cuticle, and those which supply the secreting capsule of the bulbs of the hair, are not the same;" indeed it must be obvious at once, that the structure of the hair requires, in its formation, an arrangement of vessels materially different from that producing a substance so entirely dissimilar to it as the cuticle.

Thus the offices of the skin, with which its diseases are most immediately concerned, are, 1. Secretion of the perspiratory fluid. 2. The production and nourishment of the cuticle. 3. The supply of the sebaceous follicles and secretion of their contents. 4. The support of the sheaths of the hair; having, as will appear from the foregoing observations, nothing to do with the nourishment of the hair itself.

Besides the diseases which form the subjects of the following pages, the skin is subject to deviations from its natural colour, unattended with organic affection of the part. The most common of these is that which fol-

lows the long continued internal employment of nitrate of silver; a medicine which, of late years, has grown into extensive use in epilepsy, and other spasmodic affections. This effect of the medicine in question was first observed by Fourcroy, and subsequently by the author of a paper in the 5th volume of the Medical Repository. In a very large number of cases recorded since that period, the same effect has followed its employment, though happily relief to the patient, from the terrific attacks of the original disease, has not been unfrequent *.

With respect to the manner in which this discoloration is effected, the opinion of M. Buttini, of Geneva †, seems to have been the first published. The seat of it has been fixed, like that of porrigo, in the rete mucosum; but

* I am aware that the opinion of the dependence of the discoloration alluded to on the internal use of this medicine, has been questioned: upon no other authority, however, than the fact, that it did not follow in a stated case the exhibition of 187 grains in 56 days. It is also acknowledged in the case in question, that frequent purging occurred while it was under exhibition. Vide Edinb. Med. and Sur. Journ. vol. v. It would probably be much more frequently and successfully employed, but for this unfortunate disadvantage.

† De usu interno preparationum argenti.

the last mentioned author has doubts whether this or the cutis itself receives the stain. "He imagines it possible that, as bile, albumen, and many other animal fluids, precipitate nitrate of silver, the colouring matter is carried through the circulation, not in the state of the nitrate, but in that of the oxide." Another explanation is as follows: "In some particular states of the constitution, there is probably more than the usual quantity of muriate of soda evolved in the secreted fluid thrown off by transpiration from the rete mucosum; and the nitrate being carried there by the blood in the course of the circulation, is decomposed and changed into muriate of silver: the muriate being insoluble, it is probably not again taken up by the absorbents, and as it accumulates, suffers its usual change of colour from the action of light *." The latter explanation may be almost considered satisfactory, when the facts that the blue colour of the skin produced by this medicine, is evidently darker, in all cases, in parts exposed to the action of light than in others

* Editors of Med. Repos. vol. vii. p. 15.

not so situated, and that it is in all cases permanent, are taken into consideration *.

Other cases are on record of even greater discolorations than the foregoing. In such instances the system has been stated to have become affected by mercury during the rubbing in of sulphur ointment for the cure of the itch; a chemical change having been effected by the union of the two substances in the mass of circulating fluids. This kind of colour does not, like the former, continue for any length of time, but disappears on the discontinuance of the medicine.

Mental impressions of a violent character have proved, now and then, equal to the effecting a total change of the colour of the skin; cases of which, from black to white, and the reverse †, have been respectably at-

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* It has been stated, I believe, by Dr. Baddeley, that the application of a blister, in such cases, is followed by a white skin: the blue colour entirely disappearing. This change, however, does not, as he supposes, follow the use of a blister in people of colour, for the spot to which it is applied becomes even darker than others after healing. After the punishment of flogging also, unless the skin has been completely cut through and destroyed, the colour becomes much darker.

† Med. Repos. Dec. 1822. Med. and Phys. Journ. Nov. 1819.

tested and recorded in periodical works very lately. It is probable, however, that the modus operandi of such a cause must remain involved in obscurity.

SECTION I.

CHAPTER I.

On diseases which obtain their distinguishing characteristics from, or originate in, local peculiarities of the skin.

UNDER this denomination I purpose to consider the varieties of what have been termed acne, sycosis, and lupus, or noli me tangere, as well as the different species of porrigo; the two former depending on obstruction of the sebaceous follicles, while the pustules of the more obstinate forms of the latter, as will be shown hereafter, may be with propriety considered as the result of the local irritation of the hair.

ACNE,

OR OBSTRUCTION AND SIMPLE INFLAMMATION OF THE CUTANEOUS FOLLICLES.

ENGLISH authors have described four varieties of this affection, under the titles of

acne simplex, punctata, indurata, and rosacea *; while Alibert, under the head of dartres, describes the first and second of these as dartre pustuleuse miliare, and dartre pustuleuse disseminée. The acne indurata and rosacea are plainly his dartre pustuleuse couperose, while the sycosis menti is well described and delineated in his works as dartre pustuleuse mentagre.

These varied designations create difficulties to the student, and are not necessary or useful. The circumstances on which they are founded are for the most part accidental and unimportant, and dependent merely on ordinary deviations from the regular progress of inflammation, or the degree of activity or its reverse which such inflammation may assume in the structure concerned.

In its simple and most trifling form, the disease consists merely of obstruction of the sebaceous follicles, in consequence of their contents becoming too hard to pass readily to the surface. Inflammation of the follicle, and the production of what is called a pimple results, and is soon followed by the formation of matter; the follicle is destroyed by this process, the matter is discharged, a little red-

* Bateman's Delineations and Synopsis.

ness remains for a day or two, and the part returns to the healthy state.

It has been customary among writers on cutaneous diseases to point out, in the discussion of each individual disease, the features or circumstances by which it may be distinguished from others. The necessity of this course will be rendered obvious, when it is considered that the external characteristics of the different affections are the only grounds on which we can proceed to make distinctions. Constitutional symptoms are seldom concerned in any great degree, and never, except in the exanthemata, to the extent which renders them of much service to us in diagnosis.

The situations in which the eruptions, designated as above, make their appearance, will generally be sufficient to enable us to determine their character. It has been observed in a preceding page, that the sebaceous follicles are chiefly distributed on the face, more particularly on the forehead, tip, and alæ of the nose, and the adjoining cutis, and less copiously on the chin. Next to these the chest, below the clavicle, to about the fifth or sixth rib, and the back to an equal extent, are most liberally furnished with them; and as the disease consists in the derangement and

inflammation of these structures; it is these parts solely in which it makes its appearance. Hence, it has been described as "an eruption of distinct hard inflamed tubercles, which are sometimes permanent for a considerable length of time, and sometimes suppurate very slowly and partially; they usually appear on the face, especially on the forehead, temples, and chin, and sometimes also on the neck, shoulders, and upper part of the breast; but never descend to the lower parts of the trunk, or to the extremities. As the progress of each tubercle is slow, and they appear in succession, they are generally seen at the same time in the various stages of growth and decline; and in the more violent cases are intermixed likewise with the marks or vestiges of those which have subsided."

In every case of this affection, a very considerable number of black points will be observed, imbedded, as it were, in the cutis. These are nothing more than the blackened surfaces of the contents of the uninflamed follicles. The skins of different individuals differ greatly in the number, as well as size, of the sebaceous follicles; and hence, in a state of health, the complexions of some are said to be more clear than that of others; the copious distribution of the black spots which have

been described, giving a dirty and less healthy appearance to the part, while their minuteness in size and numbers leaves the agreeableness of the red and white unimpaired. It is evident, however, that the simple appearance of such spots ought not to be considered as a disease, or as in any respect a deviation from a state of health. The most desirable change which can be effected, therefore, where they exist to an unpleasant extent, is that which frequent ablution and moderate friction only can produce.

A constant attention to these latter points will usually prevent, where the skin is not very thickly furnished with follicles, any discoloration of the kind described; but the whole contents of the follicle, should this not be sufficient, may be easily squeezed out with a moderate degree of force, in a manner familiar to all. As a matter of precaution, this latter step ought to be followed with respect to all such follicles as may exhibit the blackened surface described, where others are in a state of inflammation, as a preventive measure; and the worm-like substance which the contents of the follicles produce by this operation is easily removed without the use of any kind of instrument.

It is under circumstances of actual and long continued obstruction only, that the

treatment of this affection comes under the notice of the medical practitioner; the inflammation and redness of the follicle, with its accompanying tenderness on pressure, first directing the attention of the patient to it.

The immediate exciting cause of this inflammation is usually found to be some accidental disorder of the primæ viæ, the hardness of the contents of the follicle, and apparent obstruction, frequently existing for some time without the excitement of mischief, till such obvious disorder occurs. Hence, instead of the solitary appearance of one of the tubercles here and there, on distant parts of the face, a considerable number, though not very thickly distributed, are observed simultaneously on the forehead, sides of the nose, chin, &c.

There is great difference in the period elapsing between the commencement of the inflammation of different follicles, and its termination in suppuration; and consequently many of them are seen apparently only slightly inflamed, and presenting to the touch the resemblance of a small millet seed under the cuticle, while others are actually suppurated. It is not correct, however, as far as I have observed, that inflammation, as alleged by Willan and Bateman, when once begun, ever ter-

minates in resolution; for each tubercle thus formed, if punctured with a lancet when assuming an appearance of subsiding, is found to contain matter: the orifice of the follicle is in such cases closed at the commencement of the inflammatory action, and if the latter has been less violent than usual, the quantity of pus produced does not lead to the rupture of the superincumbent structure, and absorption, more or less speedily, takes place.

In the case of an extensive affection of this kind, many tubercles are found in the state described, gradually subsiding without the appearance of matter on their apices. Where, however, the latter makes its way to the surface, a few hours only elapse before it is discharged, and the only vestige remaining a day or two after, is merely a bluish red speck, which rapidly disappears. A minute scab, probably, for the first forty-eight hours, may be found covering this: these are intermixed with a considerable number of the reddened tubercles before mentioned, and the blackened orifices of a larger portion of the uninflamed follicles *. In most instances, when inflam-

* A very good, though much enlarged view of the simple distended follicle with the discoloured contents, mixed with others containing matter, is given by Dr. Bateman, Delin. 62. of Acne Punctata Simplex.

mation in the follicle begins, its orifice is soon closed up by the attendant tumefaction, and the blackened speck disappears; but it sometimes happens, that the latter is observed in the centre of the pustule, in which case, the sebaceous matter is surrounded by pus, and eventually discharged with it; still, however, it retains its solid form, though insulated in this manner, when it is easily detected by rubbing the contents of the pustule between the finger and thumb.

It has been constantly observed, that persons of a sanguine temperament and florid complexion have been most subject to follicular inflammation; and among these, that young men between the ages of twenty and twenty-five have been the greatest sufferers from it. Females, at the same age, are also subjects in whom its visitations are not unfrequently manifested; but, in the latter, it rarely proceeds with such rapidity to suppuration, or produces such unpleasant appearances as to extent. On the contrary, from the absence in a great measure of those exciting causes which difference in the habit of living produces in the male sex, females, particularly of pale complexions and lax fibre, are more often seen with a really considerably enlarged state of the follicles, without a vestige of inflammation.

Independent of the disposition to this affection which the habit of living may generate, some individuals are peculiarly disposed to it from original formation of skin; and hence has arisen the idea of its hereditary character. In such cases as I have had an opportunity of noticing, particularly where the parents of those affected had been formerly sufferers, I have entertained no doubt, that not only a free determination to the skin marked by florid complexion existed, and contributed largely to the materials of inflammation, but that the number and size of the follicles were considerably less than in subjects where the disease did not occur; but it is not to be expected that we shall always find an obvious cause either in this formation of skin, or in disorder of the digestive organs, for every obstructed or suppurating follicle which may be noticed.

In the skins of some individuals, small pearl-like tubercles are observed, here and there distributed, in parts where the follicles are most numerous. This appearance arises from the deficiency of any opening in the cuticle, corresponding to the orifice of the follicles in the cutis; the contents of the follicle being thus retained at its orifice. The description of vitiligo, in the Synopsis of Bate-

man, is in some respects exceedingly applicable to this state of parts, and it is not improbable that the latter has given rise to the idea of such a disease as vitiligo. The tubercles I have described, however, seldom attain the size of a wart, as stated in the latter affection, nor are productive, if occurring on the scalp, of any serious mischief to the hair. They now and then suppurate, but sometimes remain stationary for a considerable period, and ultimately disappear by absorption, or are liberated by the exfoliation of the cuticle, and wiped away.

When disorder of the digestive organs has been the immediate exciting cause of acne, the symptoms of such disorder appear to be materially alleviated: and there is no doubt that more formidable mischief is sometimes prevented by its occurrence. In the treatment of the mild and transient kind described, therefore, the state of these organs, and the general condition of the system, ought to occupy the chief attention: not so much, however, from the fear of doing mischief by sedative applications in repelling the eruption, but as leading to the most direct remedial measure.

Repellents, as they have been termed, seldom have any effect in preventing suppura-

tion, and this indeed ought to be considered the most desirable course it should take. Frequent bathing the parts with warm water, and gentle friction with the mildest kind of soap, constitutes by far the best kind of local application; its effects being at once to allay irritation, and promote suppuration, and also remove any accumulation in the follicles of the part as yet uninflamed.

The use of stimulants, except in the old established and indurated state of this affection (of which we shall have to speak hereafter), as practised by the ancients, and approved by Dr. Bateman, is obviously improper. It is in truth opposed to the first principles of surgery. It requires no argumentative reasoning to prove, that such applications will not prevent the suppuration of the follicle, or that such suppuration is the most speedy and safe termination to which it can be conducted. Indeed the use of stimulants seems to have occurred to the writers alluded to, only as being preferable to sedatives, repellents, or such applications as, by checking the determination to the cutaneous surface, may endanger parts of more importance. They are capable, however, of adding much to the irritation and extent of the disease, and consequently of protracting its duration and course, while the plan which conducts the tubercles

to a safe and healthy suppuration is at once conformable to the obvious indications of nature, least painful to the patient, and free from danger of the supposed prejudicial effects of sedatives.

It may be not improper to notice here the recommendation of blistering, alluded to by Dr. Bateman, and originating, I believe, with Darwin. I entertain not the slightest doubt of its immediate effect in putting a stop to the disease; the mouths of the obstructed follicles are at once cleared by the vesication, and their contents loosened and easily got rid of, while the inflammation in each particular follicle is checked by the counter-irritation produced on the surface in its neighbourhood; but it is a remedy unnecessarily severe, and exceedingly inconvenient.

The constitutional disposition to this affection, which is occasionally observed in young men, is usually found to depend on a plethoric state of system; and as it is obvious that such condition would lead to a more solid and adhesive secretion of the sebaceous follicles, this fact is readily explained. The increased irritability attendant thereon will explain also the pain and tenderness of the tubercles, and the rapidity with which they run on to suppuration.

It has been observed that these affections

are usually of too trifling a character, except in females, to induce persons affected to take professional advice; and Celsus has informed us, that for the sake of females only he has thought proper to notice it. Like all other diseases, however, where frequent attacks of inflammation of the affected structure take place, it unfortunately happens that a change is gradually wrought in the structure and appearance of the surrounding skin, and if due attention be not paid to it, great disfiguration and unpleasantness of appearance is likely to take place. The acne indurata and rosacea, are instances of this occurrence, and no individual can be reasonably charged with too much anxiety regarding personal appearance, who would be desirous of avoiding the characteristics of these.

A. INDURATA. A ROSACEA. DARTRE PUSTULEUSE COUPEROSE, &c.

The foregoing remarks apply more particularly to the states and consequences of obstruction of the sebaceous follicles, denominated acne simplex and acne punctata. When it occurs more extensively, and habitual disorder of the digestive organs, or scrofulous diathesis, exist, a slow and un-

healthy suppuration takes place, spreading from the originally inflamed follicle, and involving to a considerable extent those in the neighbourhood, producing, instead of a minute pustule, a considerable, though slowly formed, collection of matter. The latter, instead of finding its way quickly to the surface, accumulates and disorders the substance of the cutis to a great extent. Its course and extent is marked during the more active state of the inflammation by a florid-looking and very irregularly formed, rather prominent, tubercle, exceedingly tender to the touch, and after a time becoming in some one or two points soft: still the superincumbent skin is not ruptured, and it eventually assumes a dark blue colour. In this state it sometimes comes under the notice of the surgeon, when the existence of matter being ascertained, a lancet is thrust into it, and the contents discharged, leaving for some time an unhealthy livid edge to the orifice, which slowly heals, and, in most instances, leaves a mark of some duration on the part. If neglected beyond a certain extent, however, and this course is not taken, the matter is either absorbed in the most sluggish and protracted manner, or a small portion remains to find its way through the skin, leaving a minute sore, which soon dries

up; a blue discoloration of the spot sometimes remaining for months.

I believe this state of the affection, as represented by Dr. Bateman in his plate of acne indurata, to be in all cases the result of established disorder of the stomach and bowels, or of scrofulous diathesis. Where the latter did not manifestly exist, the former seemed to have been very frequently aggravated by the greatest inattention either to the quantity or quality of the aliment received.

From the more extended character of the inflammation, doubts may at first sight be reasonably entertained as to the analogy of this species with the first mentioned; in other words, as to its origin in the follicles of the skin. The identity of these affections are, however, sufficiently manifested where a minute examination is instituted in any case of extensive mischief; for the incipient inflammation of single follicles is in such cases almost constantly found intermixed with the larger tubercles formed of inflamed clusters. No other eruption, moreover, ever assumes in the remotest manner an approximation in appearance to this affection, and is at the same time confined, as this is, to parts where the follicles are more particularly distributed.

As in the former cases, the first appearance,

different stages of the progress, and final termination of the disease, are often seen co-existent on the face, neck, and breast of the same individual, and generally also a considerable number of enlarged and distended, though uninflamed, follicles of the acne punctata.

In the common treatment of this affection, it is lamentable to witness the complete deficiency of attention to common surgical principles; and though it is noticed by different authors, that local treatment forms a great portion of what is necessary to be attended to, no notice is taken of any particular application beyond those of a generally stimulating character.

It is clear, from the most superficial observation, that a disease, consisting in its origin of active inflammation, and in its progress of those variations only which particular constitutions or states of system originate previous to final suppuration, can rarely, if ever, require local stimulants; and in this particular affection, I have no doubt that such applications, before the matter has been discharged from the tubercle, are highly improper.

If any vestige of active inflammation remain, it should be soothed, and suppuration promoted by poultices and fomentations; and

if any tubercle should be found assuming the blue colour without signs of matter coming forward, it should be freely punctured. As in the case to which I formerly alluded of simple healthy inflammation of the follicle, where the orifice had been obliterated by the inflammation, and no external appearance but that of a minute tubercle existed, suppuration will, in almost all cases, be found effected, and the cure will follow infinitely more rapidly than where stimulants only are relied on.

The contents of each tubercle being evacuated, and the temporary additional irritation which the puncture excites having subsided, the use of stimulants is plainly indicated. The absorbent vessels are capable of producing a very considerable effect on the thickened and discoloured cutis of the part in a very short period, even unexcited; but a very manifest advantage, notwithstanding, usually follows the employment of spirituous lotions. The oxym. hydr. dissolved in proof spirit, in the proportion of five grains to eight ounces, with which the spots are lightly sponged, seems to be entitled to a preference over other formulæ as lotions; but if made of greater strength, it frequently irritates the skin. Were it not for the unpleasantness of the application, the mercurial ointment would answer the pur-

pose by far better than any thing else. In severe cases it may be safely depended on for doing all which any application is capable of.

With regard to the constitutional treatment necessary, in all such cases as have come under my notice, the tonic plan seemed to be called for, and was followed, in conjunction with the local management detailed, by pretty uniformly successful results. The history of the patient usually disclosed a disposition to voracity, with little anxiety at any time by what species of food gratification was to be obtained. A furred, yellow tongue, offensive breath, frequent heat and feverishness, with considerable languor at intervals, and irregularity of bowels, seemed to have been the consequences, which, however, with the exception of some debility, were speedily removed by a short alterative course of medicine, and a strict attention to diet. A plethoric state of system, with a generally healthy condition, is, I believe, incompatible with this form of disease altogether.

Sometimes the extent of the mischiefs of follicular obstruction and inflammation is confined to the tip of the nose, producing a considerable enlargement of these parts; and, perhaps, of all deviations from health to which

the human frame is liable, this is one which obtains the least commiseration. The general impression is, that it is the offspring of what is commonly called good living, and in the only case which I have met with, where hard drinking did not form a part of the habits of the patient, an extraordinary appetite, not of the most delicate kind, was well known to exist.

It would not appear to deserve a separate consideration from the preceding, but from the circumstance of its limited extent and very constant dependence on the habits alluded to. From the latter fact, it has been frequently considered an indication of diseased liver: affections of this organ, however, of a tuberculated character, the known usual consequence of dram drinking, are by far more frequently unaccompanied with the slightest disposition to this deformity; while persons in the possession of what they consider unimpaired health, enjoying better appetites for food, and exhibiting fewer indications of general disorder than falls to the lot of those who labour under hepatic derangement, generally become the subjects of its most aggravated forms. It is a state of the disease, moreover, rarely indeed seen in that class of society where indulgence in the use of spi-

rituous liquors to the most deleterious extent is quite common, to the exclusion of necessary portions of good animal food.

The chronic inflammatory redness and enlargement of the nose, which constitutes the state of acne rosacea, the affection under consideration, is always the result of repeated attacks, or of long continuation of the obstructed state of the follicles, the direct exciting cause being an overloaded state of the stomach, and frequent excessive and general excitement of the digestive organs. There seems to be a satisfactory explanation of the disease being first found to attack the nose, in the fact, that the follicles are here very thickly distributed, while it is more exposed to the chilling effects of cold, and consequently more frequently to the effects of reaction; constant checks being thereby afforded to the healthy progress of suppuration, as well as means of increasing and extending the inflammation.

From the operation of these causes, collections of matter, equal in extent to the space occupied by three or four follicles, are frequently concealed under a smooth red tubercle for weeks; its existence under such tubercle not being suspected. As the disease advances, and the exciting causes arising out

of the habits of the subject are still kept up, others are formed in the same way, which, now and then, as in the common indurated state, proceed to suppuration, leaving half the dimensions of the tubercle existing, which, perhaps, never is entirely removed by the absorbents.

From the protracted duration of the complaint, and the succession of the phenomena detailed, in every part of the tip and alæ nasi, the irregular tuberculated nose is at length fully formed, and every thing like follicular organization is completely destroyed. The usual secretions of the part are thus prevented, and, consequently, the turgescence is increased, and confirmed chronic inflammation takes place, which nothing but a plan of living diametrically opposed to that previously followed, affords any hope of removing.

A minute examination of the spot, when the disease first makes its appearance, will usually enable us to detect a state of parts where the puncture of a lancet is called for: minute collections of matter may be in this way discharged from the centre of apparently incipient tubercles, and the thickening of the skin will often in this state rapidly disappear, if purgatives to a small extent and attention to diet are had recourse to at the same time.

Emollient applications may be employed

with advantage for some time after; and when the florid redness begins to be followed by marks of diminished energy in the vessels of the parts, the stimulant plan may be adopted with final success. Sometimes the alæ nasi, when in the above state of indurated enlargement, become suddenly covered by a vesico-pustular eruption, assuming a different appearance from the original disorder. This eruption does not last beyond a few days, and appears generally as the result of some temporary additional cause of excitement.

In my original essay submitted to the attention of the College, I alluded to the practice of a surgeon in the habit of advertising his success in affections of the kind under consideration, and I stated my belief that the practice in question consisted of the liberal use of friction by means of soft brushes to the part, assisted by soap and warm water. It is certain that this treatment is capable of producing a great diminution of the tumefaction and redness, and of bringing about a more healthy state of parts. In some cases in which I have been led to prescribe it, the cutis has become thinner, and enabled me to detect considerable collections of matter, which have been speedily discharged, and followed by importantly beneficial alterations in the appear-

ance and size of the part. It seems that a more healthy stimulus is thus given to the vessels of the spot, and suppuration effectually promoted by the friction, while the attendant irritation is subdued by the use of warm water as a fomentation; the adjoining follicles being, as before stated, kept from accumulation and obstruction. Having their secretion thus going on freely and copiously, they still further assist in relieving the turgescence of the part.

The most obvious symptom of disordered state of the stomach prevailing in this affection is acidity, and a great opinion has accordingly been entertained of the use of alkaline medicines; but it must be sufficiently clear, that unless the patient can be prevailed on to correct the habits on which such acidity or other disorder depends, little ultimate benefit can be obtained.

It would be improper to pass over this part of my subject without noticing the occasional excessive dilatation and growth of obstructed follicles, where inflammatory action and suppuration do not take place. The formation of atheromatous tumours, first, I believe, noticed by Sir A. Cooper, as dependent on follicular obstruction, is unquestionably the result of the absence of excitement in the fol-

licle when first distension is effected. If inflammatory action does not happen to occur at this period, an encysted tumour of small extent is formed, and continues to grow, the follicle appearing, after distension to a certain extent, to lose its susceptibility. I have extirpated a considerable number of these tumours, and have invariably found their contents to be precisely the same as the sebaceous matter of the follicles; while the cyst, as it has been termed, which contains it, exhibits no greater difference from the delicate membrane lining the parietes of the follicle in a healthy state, than is common with other membranes lining cavities under circumstances of diseased enlargement of such cavities.

CHAPTER II.

LUPUS.

NOLI ME TANGERE, HERPES EXCEDENS, DARTRE RONGEANTE, &c. &c.

THE reasons for which we have assigned this position to the above disease will be found in the following pages.

It has been described by different authors under designations varying ad infinitum. In England, the name by which it is best known is that of Noli me tangere, which certainly conveys an idea of no pleasing character as to its nature. It is in truth a very horrible disease, very tedious and uncertain in its progress, and very little influenced by remedies of ordinary use.

The pathology of Lupus is involved in some obscurity. In public hospitals in this country cases are not unfrequently noticed in its middle and advanced stages, but private practice among the better classes of society furnish comparatively few instances of it. Hence it seldom comes under the eye of the pathologist at its commencement, the unfor-

tunate occupants of our charitable institutions usually suffering it to make considerable progress before they apply for relief.

Some authors have described it as an irritable unhealthy ulcer, situated about the tip or alæ nasi, gradually extending itself and destroying first the cutis and then the cartilages of these parts, ultimately spreading to an uncertain extent on the cheeks; while others more properly begin their accounts by describing one or more tubercles of a red or livid dull brown colour, which remain apparently unchanged for a considerable length of time before ulceration commences.

Some have correctly stated it to originate, when on the nose, in unhealthy inflammation and ulceration of the cutaneous follicles of this part, but have omitted to explain its occurrence where the follicular apparatus is materially deficient or altogether absent. In a majority of cases, however, a tubercular elevation of the cutis, marked by the characteristics of languid circulation, and having a soft and pappy feel, precedes and forms the basis of the ulcer.

The importance of the disease appears to warrant a description applicable to its characteristics in different parts. When it makes its appearance in situations where consider-

able thickness of cellular membrane, or other structure, intervenes between the cutis and more solid parts, it presents the character of a soft venous coloured tubercle. A few of these are found usually on the fore-arm and about the elbow joint. In one or two instances, the largest was discovered to have an old cicatrix from venesection in its centre. The figure of the tubercles varies, and, where there are many, some will be found oval, and others round; while others, more irregularly shaped, are evidently formed of two or three smaller tubercles joined together. They are most elevated and darkest coloured in their centre, and on being pressed and examined, feel as if they contained fluid. Their progress is extremely slow, and if cut into much before the skin becomes broken, their internal structure is found somewhat to resemble a stringy slough, similar to that to be described hereafter, as surrounding the basis of the conical scabs of Rupia, where pressure has been employed, though of a clearer white than the latter.

When ulceration takes place, it is generally in or about the centre of the tubercle, and the ulcerated spot is immediately covered by a shining gummy exudation, which grows to a hardened scab in the course of a few hours.

The surface of the sore seems to sink with more or less rapidity below the surrounding parts, and gradually assumes the appearance of a deep excavation, the bottom, sides, and edges of which are lined with the scab described. In this manner the disease continues to extend till the original tubercle is wasted away; when, if care has been taken to alter the state of the constitution, the surface gradually assumes a healthy condition. A sensation of heat and tingling is felt during the whole course of the disease till this change takes place.

Such has been the history of several cases which have come under my notice, in all of which a cachectic state of system was evident at the commencement.

In the treatment of these cases, the state of the stomach and bowels required for a considerable time the exhibition of mercurial alteratives. These were followed by tonics and a better regulated mode of living. The local applications consisted, while the heat and tingling continued, of poultices made with the nitrous acid lotion, and, subsequent to this, of the latter fluid by means of pledgets of lint.

When occurring on the nose, the tubercular prominence is considerably less extensive. As

in the case of acne indurata, it may sometimes occupy the space of six, eight, or ten of the mouths of the cutaneous follicles. Like the A. indurata, it has a bluish inactive appearance, while the cutis around it wears a reddened and tumefied character. If the adjacent parts be minutely examined, the orifices of many of the follicles are found covered by a thin pellicle of scab of a yellow colour, which easily separates and gives exit to a sanious discharge very unlike the natural secretion of the follicle.

In the course of time the skin in the centre of the tubercle breaks, and a little unhealthy speck of ulceration is perceived, which gradually enlarges in circumference, and more or less rapidly deepens. The character of the ulcerated surface is however peculiar, and when the scab is cleared away it appears as if covered by a layer of dark-brown varnish, and little or no discharge takes place from it. As the sore extends, it takes within its boundaries some one or more of the adjacent already diseased follicles, and thus spreading over the surface, it converts the whole of the parts into a ragged brown scabby ulcer.

The process by which the destruction of parts is effected has a marked peculiarity in this disease; a gummy exudation forming scabs,

instead of a purulent secretion, continues through its course, and yet the absorption of structure will be at some periods proceeding with the utmost rapidity, and the excavation and destruction of parts in proportion, while at others no change will be perceptible for days and weeks. While the inflammation and swelling is considerable, there is great tingling, itching, and a sense of smarting or burning pain. On exposure to cold, the patient experiences a very severe degree of pain; while warmth, if suddenly applied, is followed by excessive heat and excitement, and a proportionate aggravation of the disease. I have never met with any case where the patient had not been aware of a change for the worse during the winter season.

As the disease proceeds, some one or other of the affected parts assume for a time an appearance of improved and even healthy action, and tolerably healthy granulations are formed; and now and then even cicatrization will be effected to a small extent. The diseased action in such a case seems only to leave one part, in order to propagate itself more extensively in another; and it seldom happens that if a portion of the diseased surface heals, another does not exchange a passive for an actively mischievous character. Eventually the tip and alæ of

the nose are destroyed, and the openings of the nostrils, in consequence of the thickening of the parts and the accumulation of the scabby secretion about them, are nearly closed. The redness and inflammatory action extends up the nose, and even spreads to the eyelids and eyes. The lips and cheeks sometimes suffer, and cases are on record where the bones of the nose have been destroyed.

Sometimes the original sore is not the only one concerned in the work of destruction; one, two, or more of the inflamed and ulcerated follicles, described as at first covered with a scab, appearing to take on the same character, spreading and destroying the skin in the same way, till they all join and form one common sore. In some cases the tubercular formation is altogether absent from the beginning, when the disease appears to commence at the mouths of a few of the follicles. In such cases, the little scab described is perhaps rubbed off, another and another forms, fresh irritation and mischief is produced, till the character of the disease is established, and it pursues its course.

The spreading destructive ulcer, which answers to the description of Noli me tangere of some authors, has been observed in a few instances to occur as the apparent conse-

quence of chronic inflammation of the cartilages of the nose. I have been acquainted with one instance of such origin, and in the inquiries as to the history of some others, have been led to the opinion that such cases are more numerous than have been supposed. The particulars of one instance, and that of a very distressing nature, have been furnished me by a medical friend.

The subject was a young and interesting female, the daughter of an artist of considerable eminence. The attention of the latter was first directed to it by the discovery of a very trifling enlargement of the right ala, which was unattended with pain or discoloration. As the enlargement increased, medical advice was obtained, but none of the applications had recourse to appeared to be productive of benefit, though combined with judicious constitutional management. After a time, a speck appeared on the most dependent part, which terminated in the kind of scab described as characteristic of the disease. From this period the wasting of the integuments and cartilages went rapidly on (the sore extending over the tip to the opposite side), till the whole organ was destroyed.

On the subject of the causes of Lupus, much difference of opinion has been expressed

by different authors. Alibert, Rayer, and other French writers, consider it of scrofulous origin *, whilst most others who have noticed it appear to have had no suspicion of such a connexion. On the whole, it seems probable that the cases which, similar to that mentioned, have originated in inflammation

* "Le développement des tubercules du lupus, quelle que soit la région qu'ils affectent, est ordinairement précédé ou compliqué de plusieurs maladies de la peau ou des ganglions lymphatiques, fréquemment observées chez les scrophuleux. Presque tous les individus chez lesquels on a vu naître les tubercules du lupus avaient éprouvé, dans leur enfance, des engorgemens plus ou. moins considérables des ganglions lymphatiques, du cou, des aisselles, des aines, etc., qui chez plusieurs s'étaient terminés par des ulcères chroniques. D'autres avaient été atteints de la teigne muqueuse de la face ou du cuir chevelu, d'ophthalmies scrophuleuses, longues et rebelles, et d'inflammations des os de même nature; on a vu plus rarement des individus atteints du lupus être affectés de l'œdème des membres abdominaux et succomber aux progrès d'une inflammation des organes digestifs; car, en général, l'influence du lupus ne s'étend pas au-delà des parties qu'il affecte ou qu'il envahit successivement.

"Les tubercules du lupus se développent le plus ordinairement chez les individus doués d'une constitution scrophuleuse, dans la périod comprise entre la sixième et la vingt-cinquième année. On assure que les habitans pauvres de la haute Auvergne, qui se nourrissent d'alimens âcres, tels que de vieux fromages et de viandes fermentées, et qui logent avec leurs bestiaux, en sont fréquemment affectés. Cette maladie n'est pas contagieuse, et on l'observe rarement dans les classes élevées de la société."

of the cartilages, are really of this nature, while the more common forms seen in England, are the results of disorders which the habits of the individual have induced. In the case mentioned, a scrofulous diathesis was certainly manifest; but I believe that for every such case, twenty others come under our notice, where the subjects are accustomed to indulgences in spirituous potations, and habitual violence to the digestive organs, whose histories disclose nothing of what M. Rayer has so particularly stated to have occurred in the earlier periods of life of the subjects of his observation.

At the period of its development, moreover, and even in its advanced stages, as it occurs in this country, where much distress of mind, and a considerable aggravation of constitutional disorder has been observed, the glandular system has been seldom affected, or any other mark of scrofula existing; a fact which in itself may be considered almost conclusive against the opinion in question. It would seem, indeed, that no form of disease of a clearly scrofulous origin approaches in similarity to this in any other points than its tediousness and intractability.

It has been compared, and probably sometimes confounded, with scirrhous ulcerations

of these parts; but the features by which it may readily be distinguished from such affections are, 1st, Its situation; cancerous disease of these parts usually first occurring on the lower lip. 2nd, The uneasiness belonging to it is in no case described to be worse than are comprehended under the general designations of heat, itching, tingling, or smarting, while scirrhous ulceration is accompanied by severe darting pains. 3rd, Diseased enlargements of the contiguous glands do not often make their appearance in its train, even though the disease has existed for years, which is not the case with cancer. 4th, The surface of the sore is never occupied by fungous granulations, or has thickened and hardened or everted edges, but retains its peculiar character to the last.

The experienced eye will discover at first sight several other points by which it may be known, but unfortunately successful treatment is by no means a consequence of such knowledge; and, as far as I am aware, even up to the present time, all which can be said on this point consists of a simple detail of such measures as have appeared to be beneficial in a few cases, and failed in perhaps a hundred others.

Referring to the different descriptions of

this disease already alluded to, as to its commencement in the form of a tubercle, or of ulceration of the sebaceous follicles of the integuments of the nose, it would seem a matter of interest to inquire, 1st, whether it originates in an actual tubercular growth of a portion of these integuments, when it happens to wear such an appearance? and 2nd, whether when spreading in the manner described from the orifices of one or more of the follicles of the part, the correctness of the opinion be established as to its origin in unhealthy inflammation and ulceration of such follicles?

Now, the description of acne indurata with the pathology of this affection given in a preceding page, will enable us to discover points of similarity of a most important nature between it and the tubercle of lupus, before the skin of the latter is ruptured, and ulceration begins, though after this period the resemblance is lost. A brownish or livid tubercle is formed in both, and formed in the same way, i. e. by the accumulation of the contents of the diseased follicles, and consequent inflammation of the adjacent parts. In the former case, if punctured, it heals slowly, but in the end satisfactorily; while in the latter the healing process may be courted in vain for

months, and even years, and the destruction of parts will still go on. If a follicle suppurates in a healthy way, and the contents of the minute abscess are discharged, as in acne simplex, it speedily heals; but if its orifice be covered by a thin scab, if heat, itching, and much irritation be present, it does not heal, but assumes the diseased action described as characteristic of the disease under consideration.

Reasoning on these facts, and bearing in mind the organization of the parts which are so frequently the seat of the two diseases, we must be compelled to consider noli me tangere to originate frequently in an unhealthy inflammation and ulceration of the cutaneous follicles on and about the nose, spreading to and involving the adjacent cellular structure.

If this opinion be correct, it follows that the tubercular formations on other parts of the body, which are considered to be of the same nature, are really essentially different, so long as they wear a tubercular character, their interior being made up of solid organized structure. The similarity of the mode of extension of the ulcerations, after the skin has been broken, has however so much of identity of character in it, as to render a wider separation than we have adopted unnecessary.

The disease has been already stated to occur chiefly among the lower classes of people, and its most severe and aggravated cases will be found among those of individuals who have been before subject to the worst forms of acne, which circumstance appears to form another point of similarity between the histories of the two diseases.

The results of any inquiries as to the causes of the extreme obstinacy of lupus may be, at present, thought problematical. The constant exposure of the parts to extreme vicissitudes of temperature consequent on their situation would, it is evident, very much operate to prevent a healthy process of reparation where the disease is once established. A still more powerful obstacle will generally exist in the want of resolution on the part of the patient to abstain from habits which originated it: and it is evident, that the cellular structure and cutis covering the cartilages of the nose are so thin, as to be inadequate in energy of circulation to overcome obstacles of this nature to the healing of the part.

TREATMENT OF NOLI ME TANGERE.

According to the statement of authors, of all the medicines, or medicinal applications, which have been tried in the treatment of

lupus, arsenic has been found most frequently useful. "Ulcers of this kind differ exceedingly from one another in their degree of virulence, but they are all so far of the same nature, that arsenic, in general, agrees with them, and puts a stop to their progress, while they are aggravated by milder dressings*."

General alteratives, as Plummer's pill and the decoct. sarsæ comp. are in most cases advisable, and now and then of the greatest utility, any important derangement of the digestive organs, or febrile excitement, being first removed by adequate means. If no advantage is derived from these, in combination with common sedative applications, arsenic ought to be used, both internally and externally. This valuable medicine is usually exhibited in the form of Fowler's solution; but at St. Bartholomew's hospital a different formula is employed. It is proper to increase the dose gradually, till some manifestation of tendency to disorder of the stomach and bowels occurs, when it should be entirely withheld, and purgatives, with opium substituted, till such symptoms have subsided. The form of lotion is that best adapted for external application, and I have usually tried,

* Sir E. Home on Ulcers, edit. 2, p. 267.

though only now and then with advantage, a preparation somewhat resembling that below *. Ointments, or any other greasy applications, with one exception, are highly objectionable: they appear usually to increase the heat and irritation, instead of diminishing it. The spirituous arsenical solution is, in most respects, superior to others, possessing, as it does, the specific powers of the arsenic, with the sedative properties of spirituous evaporation.

Solutions of nitrate of silver of various strength are said occasionally to do good when the arsenic fails, as also, that touching the smaller sores with caustic is occasionally followed by healthy granulations: in situations, however, where the formation of a slough is not likely to add to deformity, the free use of caustic ought to be had recourse to, as if no great disorder of constitution exists, a healthy state of parts is often speedily produced at once. The dependence on the uncertain effects of milder applications is, in many cases,

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* ℞. Kali arsenicati, gr. iv.
Aq. menth. sativ. ℥iv.
Sp. vini tenuior, ℥j. Misce et cola.

The solution alluded to for internal exhibition is but of half the strength. It is employed at the same time internally in doses of two drams three times a day.

followed by disappointment in the end, and by a greater destruction of parts than the caustic ever effects.* In two different cases within the last year, where I had reason to be confident of the attention of the patient to the prescribed rules of diet, &c. I have freely applied the nitric acid to the parts, and produced a healthy sore, which speedily healed.

From an attentive observation of several cases of lupus continued for a long time, I am satisfied that the want of success in its treatment arises, either out of the difficulties of keeping the parts free from the influence of atmospheric vicissitudes, or the patient from habits destructive to his general health; in either of which cases medicinal treatment, or local applications, might *a priori* be expected to fail.

Rayer, indeed, in the work already quoted, observes on the increased difficulties attending its management in the winter season; and as this writer appears to have collated from the best French authors, it does not appear that we can better conclude this subject, than by inserting the following extract as a note. It will, at all events, show somewhat of the practice, and a few of the opinions of our French brethren on this very troublesome disease. The preparations they employ as

applications to the part are, on the whole, considerably more active than such as we are accustomed to; but I am inclined to think, that where the habits of the patients can be directed and controlled, they will not prove to be more successful *. A great error has been

* "Lorsque le lupus est dans son premier état, s'il s'est développé chez des individus non scrophuleux, il faut appliquer une ou deux sangsues dans le voisinage de chaque tubercule; couvrir ces petites tumeurs avec des cataplasmes narcotiques, faits avec la pulpe fraîche de plantes solanées, telles que la jusquiame, la morelle, &c. Chez les scrophuleux, au contraire, on emploie avec plus de succès les amers, tels que la décoction de gentiane, l'élixir de Peyrilhe, le sirop antiscorbutique, les bains froids et les bains sulfureux, surtout lorsqu'on favorise les effets de ce traitement par un régime fortifiant, l'habitation dans un lieu salubre, &c. Lorsque l'état des organes digestifs le permet, on opère quelquefois avec avantage une révulsion momentanée sur ces parties. Bateman a conseillé d'employer dans les mêmes circonstances la solution de muriate de baryte, pour opérer la résolution des tubercules développés sur la face; mais cette préparation offre des dangers si réels, qu'il faut en général éviter d'en faire usage. Le muriate de chaux, quoique moins actif, ne doit jamais être administré sans qu'on en surveille attentivement les effets. En résumé, le traitement tonique conseillé contre les scrophules, me paraît le plus propre à opérer la résolution des tubercules et à prévenir leur ulcération; mais il doit être dirigé avec prudence et de manière à ne pas fatiguer les organes digestifs.

"Les ulcères du lupus du nez ou des joues ne se cicatrisent ordinairement que lorsqu'on en a avivé la surface à

usually committed in the treatment of this disease, in the non-attention to the tempera-

l'aide de certaines préparations, dont l'expérience a démontré l'utilité. Comme plusieurs autres maladies chroniques de la peau, ces ulcères sont traités avec peu de succès pendant l'hiver.



"Parmi les préparations conseillées contre le lupus ulcéré, je place en première ligne la poudre arsénicale et de proto-chlorure de mercure de M. Dupuytren, n° 2. D'après ce célèbre professeur, ce remède, qui agit plutôt comme spécifique que comme caustique, doit être employé de la manière suivante : 'La surface de la dartre est-elle ulcérée, humide et nettoyée, on la saupoudre avec une petite houppe chargée de la poudre ci-dessus indiquée, de facon à la couvrir d'une couche épaisse d'un millimètre au plus. Cette surface est-elle couverte d'une croûte, il faut la faire tomber au moyen de cataplasmes; puis on la saupoudre comme il vient d'être dit. Enfin la dartre est-elle actuellement couverte d'une cicatrice imparfaite, il faut la détruire; vingt-quatre heures après on saupoudre la surface, qui pour lors a cessé d'être saignante. Craint-on que la poudre n'adhère pas assez fortement aux parties, et qu'elle en soit enlevée ou entraînée, on peut la délayer avec de l'eau de gomme, ou l'incorporer dans l'onguent rosat. Dans ce cas, il faut augmenter d'un ou deux centièmes la dose de l'acide arsénieux. Dans tous les cas, il faut attendre que la poudre ou la pommade tombent d'elles-mêmes, ce qui ordinairement arrive au bout de huit ou dix jours, et renouveler les applications jusqu'à guerison complète; elle a lieu le plus souvent après huit à dix semaines, ou cinq à six applications. On sait d'ailleurs qu'un praticien instruit peut augmenter ou diminuer la proportion des élémens constituans du remède, suivant l'étendue et la profondeur du mal; mais il paraît important de n'en exclure aucun de sa composition; tous deux

ture of the atmosphere in which the patients live. Because the system is not seriously

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paraissent nécessaires à son action, sans qu'on puisse déterminer d'une manière précise la part que chacun y prend *.'

"Lorsque les ulcérations sont multipliées ou très-considérables, il convient de saupoudrer cette poudre seulement dans l'étendue d'une surface de deux pouces de diamètre, et de faire ainsi successivement plusieurs applications. Enfin, lorsque les ulcères du lupus sont très-anciens et très indolens, il y a quelque avantage à les couvrir d'abord d'un vésicatoire, avant de les saupoudrer de la poudre de M. Dupuytren. Cette poudre a, sur la pâte arsenicale du frère Côme, l'avantage de ne pas déterminer d'érysipèle autour des parties sur lesquelles on l'applique; elle cautérise moins fortement que cette dernière, mais on peut revenir, sans danger, plusieurs fois à son application.

"On a cependant obtenu un assez grand nombre de guèrisons, à l'aide de la pâte arsénicale du frère Côme. Le mode d'application de cette pâte a été exposé avec beaucoup de détails par M. Patrix. J'observerai toutefois qu'il convient de ne pas l'appliquer sur les plaies saignantes qui offrent une grande surface; l'absorption de l'arsenic pourrait déterminer des accidens graves. Avant d'appliquer la pâte arsénicale, il faut se borner à nettoyer et à ramollir la surface des ulcères par des lotions et des cataplasmes émolliens. On laisse ensuite tomber spontanément la croûte formée par le caustique. Après sa chute, la surface de l'ulcère est à-la-fois diminuée d'étendue et d'un meilleur aspect.

"Le nombre des applications nécessairés de la pâte arsé-

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* Ratier, "Formulaire pratique des Hopitaux de Paris." This powder is composed as follows:

Calomel, p. 199.
Arsenic, p. 1!

affected, they are allowed to pursue their avocations at all seasons of the year, and

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nicale peut varier depuis une jusqu'à vingt et au-delà, suivant le nombre et l'étendue des ulcères. L'emploi de ce topique donne souvent lieu au développement de l'érysipèle de la face. Lorsque les applications doivent être répétées, cette circonstance exige même qu'on laisse entre elles un laps de temps assez considérable.

" MM. Richerand et J. Cloquet ont aussi obtenu la cicatrisation d'ulcères très-rebelles du lupus, à l'aide de cautérisations pratiquées avec le nitrate acide de mercure.

" Les cautérisations avec le nitrate d'argent, la potasse, le beurre d'antimoine, &c., réussissent moins souvent que l'application de la pâte arsénicale.

" La cautérisation avec le fer rouge ne doit jamais être employée dans les larges ulcères du lupus du nez. On a vu, à la suite de son emploi, les os et le cartilage de la cloison du nez se gonfler, et être atteints d'une inflammation chronique, à laquelle ils étaient jusqu'alors restés étrangers.

" Dans le lupus ulcéré du nez, on doit veiller, lorsque la cicatrisation s'opère, à ce que les ouvertures des narines ne s'oblitèrent pas. Pour cela, il convient d'introduire et de maintenir pendant quelque temps, tantôt dans une narine, tantôt dans l'autre, un petit bout d'éponge préparée. Si par suite de l'indocilité ou de la négligence des malades, les ouvertures s'oblitéraient, il conviendrait de les rétablir à l'aide d'un caustique ou de l'instrument tranchant et de l'éponge préparée.

" Quelques remèdes énergiques ont été employés avec des résultats variés, dans le traitement des lupus ulcérés fort graves et rebelles. A *l'intérieur*, l'huile animale de Dippel a été administrée à la dose de six gouttes, et portée jusqu'à celle de vingt gouttes par jour. On a prescrit la décoction

under all changes of this kind. The diseased parts are alternately chilled and excited, the healthy action of one day is changed for a different one on the next, and the operations of nature constantly interfered with, instead of encouraged. The only cases of recovery with which I have been acquainted as taking place under medical treatment, have been those where the patients were protected from these mischievous agents.

Another cause of disappointment and difficulty may be traced to the practice of directing the attention to the centre, or other broken parts of the surface of the disease, to the exclusion of proper notice of the surrounding diseased skin. Thus the adjacent parts, to the extent of several inches, studded with the diseased follicles, far advanced to-

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de Feltz, à la dose d'une pinte par jour; les pilules asiatiques, à la dose d'un seizième de grain de protoxyde d'arsénic; la solution de Pearson, à la dose de quarante à cinquante gouttes; celle de Fowler, à la dose de dix à douze gouttes. Or, ce n'est qu'après plusieurs mois de leur emploi, que des moyens aussi dangereux ont été parfois de quelque utilité; le plus souvent ils ont été nuisibles ou infructueux.

"A *l'extérieur*, des frictions avec les pommades de protoiodure ou de deuto-iodure de mercure, ont été plus utiles; mais elles produisent souvent des érythèmes, et parfois des érysipèles."

wards ulceration, are not interfered with in their progress in any manner; and if perchance a healthy action should be brought on on the ulcerated surface, the vexation of perceiving some of the former far advanced, and rapidly taking on the scabby ulceration of the latter, is often the result. If proper applications are made to the circumference of the diseased skin, and healthy action be first established there, the disease will often give way, till the skin resumes its natural appearance, even up to the margin of the ulceration; and it is evident, that under these circumstances, the latter has a much better chance of being covered by healthy granulations. I am entitled to say, that this is a practice which has been much more frequently successful than any other, consisting of applications to the worst, or broken parts of the disease.

The application of sedative washes over the whole extent of inflamed skin during the night (the ulceration being covered by some simple application), and the rubbing in around its margin, every night and morning, a portion of the ointment prescribed below, constitute two of the most powerful measures which I have ever seen employed. Combined with proper constitutional treatment, I have found

them successful in some of the most inveterate cases *.

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* ℞. Hydrarg. subm.
Plumbi superacct. a. ℥ss.
Ung. hydrarg. nitrat.
—— cetacei a. ℥ij. M.

CHAPTER III.

SYCOSIS.

DARTRE PUSTULEUSE MENTAGRE, &c.

THIS disease is divided into two species by Bateman, according to the situation in which it appears. Its intimate analogy to the different forms of acne has been alluded to by that author, but the points of resemblance or dissimilitude have been passed over without notice. It is classed with acne in the order tuberculæ, with as much reason as that affection itself; but a correct pathological view of its character will lead to the opinion, that it really consists of a number of minute abscesses; and has, therefore, little claim to the station allotted to it.

What has been termed sycosis is nothing more or less than acne or follicular obstruction and its consequences, occurring on parts covered by hair; and though the necessity of distinction between it and the same state of parts not so covered be admitted, this cir-

cumstance cannot justify a subdivision like that adopted of S. menti, S. capilitii, &c.

Like many of the formidable diseases described by Alibert, it is seldom seen in the better classes of society; and where cases occur answering to the descriptions of this author and Dr. Bateman, but little inquiry or observation will be necessary to show its identity with acne.

It "consists of an eruption of inflamed, but not very hard tubercles, occurring on the bearded portion of the face, and on the scalp in adults, and usually clustering together in irregular patches." On the chin "the tubercles arise first on the under lip, or on the prominent part of the chin, in an irregularly circular cluster; but this is speedily followed by other clusters, and by *distinct tubercles*, which appear in succession along *the lower part of the cheeks up to the ears*, and under the jaw, *towards the neck, as far as the beard grows*. The tubercles are red and smooth, and of a conoidal form, and nearly equal to a pea in magnitude. Many of them continue in this condition three or four weeks, and even longer, having attained their full size in seven or eight days. But others suppurate very slowly, and partially discharging a small quantity of thick matter, by which the hairs

of the beard are matted together, so that shaving becomes impracticable, from the tender and irregular surface of the skin. This condition of the face, rendered rugged by tubercles from both ears round to the point of the chin, together with partial ulceration and scabbing, and the matting together of the unshaven beard, occasions a considerable degree of deformity, and it is accompanied also with a troublesome itching."

The above description is that of the S. menti of Bateman—when it affects the scalp, "it is seated chiefly about the margin in the occiput round the forehead, temples, &c. and near the external ear, which is also liable to be included in the eruption. The tubercles rise in clusters, which affect the circular form; they are softer and more acuminated than those on the chin, and they all pass into suppuration in the course of eight or ten days, becoming confluent, and producing an elevated unequal ulcerated surface, which often appear granulated, so as to afford some resemblance to the internal pulp of a fig."

The disease is shown in Alibert's plate as dartre pustuleuse, or Herpes pustulosus mentagre; but it is quite clear that this author, like Bateman, was unaware of the real character of the disease, since there does not ap-

pear any allusion to the follicular apparatus, the derangement of which forms its most important feature. The descriptions of neither of these authors apply to the majority of cases of the affection, but rather belong to those where neglect of cleanliness has contributed much to aggravate and increase the irritation with which it commences. Few young men between the ages of twenty and thirty or thirty-five escape occasional attacks of the disorder on their beards; and it almost always occurs simultaneously with more or less of irritation on the skin of the forehead. The resemblance to the pulp of a fig, whence it appears to have derived its name, only obtains in the worst and most neglected cases in the lower classes of society.

When affections of the cutis, no matter of what kind, occur on parts which are covered by hair, such affections almost invariably assume a more obstinate and formidable character; indeed, the peculiarities of most of the common diseases of the scalp depend on the local irritation of the hair.

The part occupied by the beard is generally pretty well supplied with the sebaceous follicles, and these are of course equally liable to disorder with those in other parts of the skin from constitutional causes. When, how-

ever, any accidental circumstance brings on inflammation and disorder in them, the peculiarity of their situation abounds with impediments to its termination in the most desirable manner. The mouth of the inflamed follicle and the adjacent cutis is penetrated by hair, and the violence inflicted by frequent shaving makes every individual hair a powerful mean of adding to the mischief. If a disposition in the inflammation of the follicle to subside may exist, the influenee of the operation of shaving, for instance, is sufficiently great to prevent it, and to hurry on the inflammatory action to the suppurative process. If many tubercles are formed, it is capable of increasing their size, and extending the inflammation to the adjoining follicles. I believe these effects of the operation of shaving are manifested in every case of the disease, and it will be easily understood why it should be so, when the facts that the inflamed part is penetrated by a substance like the hair, and that the latter is violently stretched upon and through it by the use of the razor, are borne in mind.

From the local influence of the hair on the inflamed spot where it penetrates the cutis alluded to, which will be more fully elucidated

in the following chapter on Porrigo, a secretion of pus is formed around many of them, the hair being situated in its centre, and these pustules intermixed with the tubercles formed by the inflamed follicles, some of which are also showing matter on their apices, make up the external characters of the disease. The same phenomena are also observed when it occurs on the scalp; the extraction of single hairs here and there forming orifices by which the contents of a pustule is readily discharged. As in common acne, if a lancet be thrust into the tubercles of sycosis (which is advisable where one or more hairs are not distinctly seen growing in it), matter will certainly be found, and a rapid subsidence of the inflammation follow; where hairs can be pulled out in the way mentioned, however, the evacuation of the matter is accomplished by gently squeezing the tubercle, without having recourse to the lancet.

From what has been said, it will appear that the existence of hair on the part, and its consequences in aggravating the inflammation, form the only difference between sycosis and acne; and where the hair can be extracted without pain, this step should not be neglected in commencing the treatment of the

former. After this, emollients and applications tending to promote suppuration and allay irritation are the best, no more good being to be expected from sedative washes or stimulants than in the treatment of the subjects of the preceding chapter.

The constitutional part of the treatment of sycosis has been already detailed; the same general remarks on this point applying equally to it and to acne. The attention to the part should be constant and unremitting, and should consist of warm fomentations frequently repeated during the day, with poultices if they can be conveniently applied at night. Every little tubercle should be punctured at its first commencement, and every hair extracted from the part which may be got out without much pain. This practice, strictly followed up, is capable of removing the most protracted and troublesome cases without the use of any internal medicines beyond alterative aperients*, and any dependence on internal remedies, unassisted by it, will inevitably lead to disappointment.

* The internal remedies recommended by Willan, Bateman, and Alibert, consist of general alteratives and tonics.

The impossibility of paying due regard to cleanliness and comfort without shaving, when the disease appears on the beard renders this operation, though painful and irritating, unavoidable; the pain attending it, however, is soon allayed by bathing the part with warm water.

CHAPTER IV.

PORRIGO.

"LES TEIGNES" OF ALIBERT.

THE degree of obstinacy evinced by the larger portion of cases of this disease, the interruption it frequently occasions to the education of children (its known infectious nature preventing their admission into schools), combine with other circumstances to give it a peculiar interest. As in many other cutaneous diseases, much of the trouble which has been taken by different authors in its investigation has been far from contributing effectually to the knowledge of its pathology or treatment. Much confusion and discouragement to the student, moreover, is attributable to the division into so many species which has been adopted; and what is known is thus prevented from becoming so generally known as it might be.

From a patient and lengthened inquiry into the history and progress of porrigo, I am compelled to believe that the abolition of

these distinctions will be eminently useful in advancing the knowledge of it; and that rather than continue to uphold the original system of describing the form, consistence, or colour of the accumulated secretions, and designating them according to these accidental circumstances, as different species of the disease, it will be better to trace the latter at once from its first appearance and original character, up to the periods when the state of the parts in question is become such as described by authors who have preceded me. To notice also those circumstances or facts which influence the formation and consistence of the diseased secretions, and render the study of the subject more simple by pointing out a distinct line of connexion between the most simple forms, and those which are considered most inveterate; or, in other words, by showing that the latter are only the result of injudicious treatment or gross neglect of the former.

In pursuing this plan, it is necessary to show whether any, and if any, what kind of primary disease is capable of those varied forms which have been described by Bateman and Alibert under a variety of designations, as Porrigo furfurans, P. lupinosa, and P. scu-

tulata, Teigne faveuse, T. granulee, T. furfuracee, and T. amiantacee*; and it will not be difficult to ascertain, in most cases, that they

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* As these diseases are sometimes seen here in those advanced and neglected forms which are described by Alibert as occurring under his notice in the hospital of St. Louis, it would be improper to omit altogether his very accurate descriptions. It will be observed, however, that they are more precise as regards the form and structure of the diseased secretions than the actual condition of the diseased surface.

The "Teigne faveuse" of Alibert is evidently the Porrigo lupinosa of English authors. It is described by the former as follows:

"It develops itself in the form of an eruption of minute pustules, which create an itching more or less violent on the scalp. The contents of these pustules dry up, and give place to the formation of small circular scabs, hollowed in their centres, enlarging gradually in their dimensions, but still preserving their circular form. As these scabs sometimes form in great numbers on different parts of the head, their edges approach each other, forming by their aggregation plates of considerable extent, in which the eye nevertheless distinguishes with facility the cup-like form of the individual scabs. This cup bears some resemblance to the cells of the honeycomb, or the fructifications of certain species of lichen. When the disease has recently appeared, the scabs are either of a yellow or fawn colour; *but as they get old and dry, they become white, wear off, break, and detach themselves from the scalp, and then you only perceive their remains, which cease afterwards to assume a regular form.*

"The scabs of this species have from the beginning their bases deeply enchased in the skin and strongly adhering to

have originated in one of two particular states of disease of the cutis about to be described.

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it; so much so, that I have never been able to detach them without great pain and some discharge of blood. Sometimes the cutis is deeply involved in the irritation of the disease, and cracks to a considerable extent are formed, from which an ichorous or purulent matter is discharged; and now and then, though very rarely, the cutis and cellular membrane are destroyed to such an extent as to expose the bony substance of the skull.

"With some individuals the disease does not confine itself merely to the head; I have seen it appear on the forehead, the shoulders, the temples, the lower part of the shoulder-blades, the elbows, and forearms; I have also seen it extend from the top of the loins to the sacrum, the front of the knees, legs, &c.

"The attendant itching is in some cases almost intolerable, and the children who are the subjects of it are induced to scratch themselves severely; they appear to experience a kind of voluptuous enjoyment in tearing the scalp with their nails. Pediculi, which multiply in great numbers under and between the scabs, add further to this irritation; all the cavities are full of them, and the whole mass appears agitated by their movement. The smell emitted by the scalp is as disgusting as its aspect, and always preserves the same character. It resembles the urine of a cat in this particular, or chambers which have been infested by mice.

"When by the help of emollient poultices the favous crusts fall off, this smell changes its character, but is still offensive. Between the different clusters of the favous pustules the skin is covered with furfuraceous scales, which are produced by the general irritation of the dermoid system of the head.

"Proceeding to the examination of the scalp, after the se-

I have never met with any instance (when satisfactory evidence could be obtained of the

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paration of the crusts and scabs which have been softened by repeated lotions and poultices, you see the reticular structure become red and erythematous. The epidermis has disappeared, and a yellowish viscous and fœtid fluid runs here and there from numerous ulcerations. You may likewise perceive small abscesses, more or less in number, dispersed over different parts of the head, taking a lenticular form, and appearing as so many centres of inflammation; but one of the most remarkable symptoms attending the disease when neglected and abandoned to its progress, is the *alopecia*, which in some cases has become almost universal.

"In the places where the hair has been rooted out, the skin remains smooth and shining; you may perceive here and there, notwithstanding, some thin hairs altered in their structure and colour, and having a lanuginous appearance."

"Teigne Granulee."—This form of the disease, or rather the state of the accumulated secretions from which it has obtained its name, is not described by English authors, nor is it represented in Bateman's delineations. It is, however, not uncommon among the children of paupers when first admitted into the parochial establishments. The ordinary attention to cleanliness adopted in these institutions, commonly leads to the speedy removal of the mass of filth which Alibert describes. It is only the sequence of an old standing utterly neglected case of T. faveuse.

The Teigne granulee does not in general occupy so large a space of the scalp as the T. faveuse, and occurs most frequently on the upper and back part of the head. It is composed of small brown or dark grey crusts, which re-

form of the disease at its first commencement) leading to an opposite conclusion.

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semble fragments of mortar, or the plaster falling from old walls which has been discoloured by damp and dust. The dimensions of these granulations vary exceedingly, and their form is altogether irregular. They are often very hard, and have even a stony consistence, which poultices cannot soften. The patches of the disease are generally a little distance from each other, are not so deeply enchased in the dermoid system as those of the T. faveuse; but sometimes, like those, they are surrounded by a considerable number of thin scales dry and furfuraceous. It has a nauseous smell, which greatly resembles rancid butter, or milk which is beginning to turn. This smell is particularly perceptible when any moisture exists on the parts, but disappears when exsiccation is completely effected.

The itching attending the disease is very great. When the crusts are separated from the scalp, the places they occupied are red, and erythematous, smooth, polished, and often swollen. Here and there small whitish abscesses are perceived, not elevated above the surface, from which issues a small quantity of viscous colourless fluid, which thickens and dries on the part, forming new crusts analogous to those preceding. The T. granulee scarcely ever attacks other parts of the body, but confines itself to the scalp and immediately adjacent parts.

The "Teigne furfuracee," or Porrigo furfurans of Willan and Bateman, when once established, so as to answer the following description, is a most tedious and unmanageable state of disease, and by far more frequently seen in England than those conditions constituting the T. faveuse and T.

The forms in question both occasionally occur spontaneously, but are also very fre-

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granulee. It does not form crusts of any thickness, but whitish furfuraceous scales, more or less thick, sometimes damp and adhering to the hair by the help of a viscous and fœtid discharge, and at others dry, and detaching themselves with the greatest facility.

The T. furfuracee begins by a slight desquamation of the cuticle of the scalp, and is often accompanied by a considerable itching; an ichorous matter flows at the same time from the affected surface, which dries and forms the scales of scurf from which the disease is named. As the disease increases by degrees, it spreads in time over the greater part of the scalp; the layers of scurf thicken, and at this period they resemble a quantity of bran or coarse flour.

If the scalp is carefully freed from this adhesive substance, it is found to be divested of its cuticle. It is usually of a pink colour, and offers a smooth, polished, shining surface resembling varnish.

Some authors have denied the existence of this form of the disease, because it is not often seen in hospitals. Others consider it only as the same diseases which have been designated T. faveuse or T. granulee, a degree less advanced; but the scabs which characterise this form are of quite a different kind from those described under these denominations. The hair is in this case matted and glued together, and when the finger is pressed upon it, the whole mass yields softly in every part nearly alike.

The T. furfuracee is chiefly confined to the scalp, but sometimes extends a little beyond its margin on the forehead, forming crusts resembling quantities of bran cemented by some adhesive fluid; the edges of these are sometimes dry and perfectly white. Much itching attends it, and

quently the results of infection. They have also the power of producing each other, as I

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great numbers of pediculi are observed ranging freely over the affected parts. Ulcerations to a small extent also occur here and there, by which the quantity of fluid secretion is increased, and has the smell of sour milk.

I have never observed this disease attack adults, but it often happens to children who have passed their first septenary, though a contrary opinion on this point has been advanced.

The "Teigne amiantacee" of Alibert is evidently merely a variety of the P. furfurans, occurring perhaps on the scalp of persons with less irritability of skin. It is evident, that such a state of skin would be less likely to favour pustulation, or the fluid exudation mentioned as belonging to the latter; and in fact, that the inflammatory symptoms would generally assume a character more approaching to chronic than active disease. Hence, in the following description we find the phenomena of chronic inflammation of those vessels of the cutis whose office it is to produce the epidermis, and a constantly repeated exfoliation of this substance in minute scales unattended with fluid exudation. The sheath which the cuticle gives to the hair a little beyond its exit from the scalp, and which is in a healthy state almost transparent, and scarcely perceptible by the naked eye, becomes by this chronic inflammation of the vessels producing it more rapidly elongated upon the hair; it grows dry and harsh, and gives to the hair near its root a shining silvery appearance resembling the fibres of asbestos; and hence, Alibert has given it its extraordinary designation.

"The Teigne amiantacee does not form crusts, but

have ascertained, beyond doubt, in a variety of instances; a fact which is, perhaps, by it-

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shining silvery scales, which, by their concretion, harden and unite the hairs nearly their whole length in parcels, and its silky and delicate appearance gives it a resemblance to asbestos.

"It generally occupies the upper and forepart of the head, and is particularly characterised by very small fine scales of a silvery or mother-o'-pearl appearance, which surrounding the hair does not a little resemble that thin transparent pellicle with which the feathers of young birds are surrounded when they are first hatched. When the hair, thus hardened with this scaly substance, is cut off with the scissors, the skin appears furrowed; it is red and inflamed, but less so than in the T. furfuracea. *The itching sensation is inconsiderable*, and as the diseased parts are usually destitute of moisture, no unpleasant smell is emitted."

The "Teigne muqueuse," or Porrigo larvalis, completes Mons. Alibert's series of this class of diseases; but the arrangement adopted in this publication compels us to place it in a distant part of the work. In his general observations on "les Teignes," he furnishes us with still more disgusting descriptions of the ravages he has seen committed by it, and cases are alluded to certainly without a parallel among those observed in England. The common history of the scalled head of long standing here, seldom discloses any connexion between the local affection and the constitution. Its history is comprised in a few words: the secretion from the pustules is allowed to accumulate, scabs are formed of it upon the surface, which being confined by their adhesion to the remaining hairs, become the means of further accumulation of this irritating fluid. The inflammatory action of the part

self sufficient to establish their identity. The description given by Bateman, as P. scutulata, applies tolerably correctly to one only, while the other is undescribed by this or any other author, except, which perhaps may be the case, the incipient stage of T. faveuse or P. lupinosa be meant to be applied to it; and it seldom indeed happens that the children of this country are so neglected as to allow the resemblance to proceed any farther than the first formation of the pustules. I by no means question the propriety or utility of tracing in a description the features of a disease at the period when it first comes under the notice of the observer, and I have inserted those of Mons. A. They may be useful as references, when the practitioner finds a case presenting itself where the utmost possible neglect has contributed to its advancement. But as by far the greatest portion of the cases occurring here are not of this nature, I shall be content

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materially increased in this way, the quantity of fluid secreted, and the means of extension of the disease, receive likewise a proportionate increase. The itching and irritation is considerable, the scabs accumulate and increase in thickness, and emit an offensive odour, and myriads of pediculi are seen creeping over and about them.

to describe them as they are most frequently met with. In doing this, I am not sorry to be compelled to resign almost entirely the nomenclature of the authors I have mentioned.

The first of these is that noticed by Turner *, in which "the hair falls off not altogether from the root, but by piecemeal." It is supposed by this author, and by Sennertus, to be produced by some insect, but they have not noticed the state of the skin of the affected parts. The attention is first attracted to it by the falling off of the hair of the part; there is little attendant itching, and no apparent fluid secretion on the spot. Sometimes, but not always, the patches are of a pretty regularly circular form, the margin being clearly defined, and exhibiting a line of scurf considerably thicker than that in the centre. In the centre of the spots the skin is scurfy, and the hair thinned, and easily extracted by the finger and thumb. What remains of it is unhealthy in appearance, some hairs being thin and delicate, others being the remains or stumps of those which have been broken or dropped off. There is a downy substance

* A Treatise on Diseases of the Skin, 1736, p. 200.

just rising above, and mixing with the scurf, evidently formed by feeble attempts at the production of new hair. Two, three, or more of these spots, varying in dimensions, are usually discovered on examining the head more particularly; and when the hair has been removed by shaving, they exhibit a red and slightly inflamed appearance. Several others in an incipient state, will be discovered in different parts. The latter may be known before the hair begins to fall off, when they exhibit nothing beyond the appearance of a small discolouration about the size of a spangle; the hue is of a yellowish red, somewhat resembling the bran of the darker-coloured wheat. Others a little larger have decidedly assumed the ringed form.

With children of light complexion, with thin and delicate hair, with no constitutional disorder, or no great irritability of skin, this will be the state in which the disease will always be found, provided no interference by stimulating or other applications has occurred; the margin of the spots not exhibiting any distinct appearance of pustulation. The diameter of these continue to enlarge rather slowly till they join each other, and a great part of the scalp is divested of its

hair; but if stimuli in the shape of ointments be applied, a more active condition often takes place, and minute achores form, not only on the margins, but on other parts. Much irritation, heat, and itching arises; the disease spreads with greater rapidity, and changes its chronic inactive character for one directly the reverse. The pustules discharge their contents, and unless the head be washed frequently during the day, layers of lightish straw-coloured scabs are formed, under which the cutis is sometimes found to be abraded to a considerable extent.

At the commencement of the disease, and for some time after, spots evidently of the same nature as the affection of the scalp may be seen on different parts of the body; but the former being usually protracted for a considerable time, from causes hereafter to be more particularly mentioned, these spots generally disappear before much improvement is effected on the scalp. To describe them more particularly would be to copy very nearly the account of the first form of Herpes circinatus of Bateman *; but the case, or cases,

* "It appears in small circular patches, in which the vesicles arise only around the circumference: these are small, with moderately red bases, and contain a transparent fluid,

from which his plate has been taken, appear to have been a different disease altogether.

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which is discharged in three or four days, when little prominent dark scabs form over them. The central area in each vesicular ring is at first free from any eruption, but the surface becomes somewhat rough, and of a dull red colour, and throws off an exfoliation, as the vesicular eruption declines, which terminates in about a week with the falling off of the scabs, leaving the cuticle red for a short time.

"The whole disease, however, does not conclude so soon; for there is commonly a succession of the vesicular circles on the upper parts of the body, as the face and neck, and the arms and shoulders, which have occasionally extended to the lower extremities, protracting the duration of the whole to the end of the second or third week. No inconvenience, however, attends the eruption, except a disagreeable itching and tingling in the patches.

"The herpetic ringworm is most commonly seen in children, *and has been deemed contagious. It has sometimes, indeed, been observed in several children, in one school or family, at the same time;* but this was most probably to be attributed to the season, or some other common cause; since none of the other species of herpes are communicable by contact. It is scarcely necessary to point out here the difference between this vesicular ringworm, and the contagious pustular eruption of the scalp and forehead, which bears a similar popular appellation.

"The itching and tingling are considerably alleviated by the use of astringent and slightly stimulant applications, and the vesicles are somewhat repressed by the same expedients. It is a popular practice to besmear them with ink; but solutions of the salts of iron, copper, or zinc, or of borax, alum, &c. in a less dirty form, answer the same end."

The vesicles of the little patches, to which I allude as connected with the ringworm of the scalp (if vesicles they may be termed) are when unbroken scarcely discernible to the naked eye, and are ruptured in a very few hours after their formation. They are, indeed, rarely seen unbroken; and when the

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On the subject of the disbelief here expressed of the connexion between this affection and the disease of the scalp, I shall take leave to observe, 1st, That when the disease of the scalp is noticed at its commencement, some of the spots in question are almost always to be found on other parts of the body. 2nd, That the original form and progress of the disease is nearly the same. 3rd, That pustulation attends that on the scalp most frequently, only from the circumstance of the hair growing through the diseased part, and exercising the properties of extraneous substances. 4th, That the diseased secretion of the scalp affection is capable of producing by inoculation the ringworm of the skin on other parts, and vice versa.

Several years ago, in a publication on this subject, I noticed the case of a lady, who from two of the circular spots on her arm, inoculated one of her children with the genuine ringworm of the scalp, the disease afterwards affecting several other children of the same family. I would further direct the reader's attention to Bateman's delineation, No. 39. He will there see the two forms as clearly exhibited as could be wished, i. e. the simple ringed incrustation on the skin of the temple, where no hair grows, and several patches on the scalp, marked by the destruction of the hair.

attention is first directed to the spot, it exhibits the appearance of a small ring of scab, of a brownish colour; and in this state is well known under the name of ringworm, and quickly yields to the application of any mild escharotic application. The frequent occurrence of these spots simultaneously with the disease of the scalp first led me to the suspicion of connexion between them, and for the reasons I have detailed below, I now entertain no doubt of their identity; the apparent difference of character being solely the result of the mischievous influence of the hair of the scalp.

The foregoing description and remarks apply, as already observed, to the cutaneous affection, as it occurs in children whose general health is unimpaired, and where the skin is not remarkably irritable. It would be superfluous to observe here, that the skins of different individuals, and even that of the same person, at different periods, exhibit widely different degrees of irritability; and the influence of this property would *à priori* be supposed to govern the character of any cutaneous affection to which the individual may happen to be subject. What happens, therefore, not unfrequently in this affection, where

much irritability of skin exists, is that instead of minute vesicles, followed by a delicate circular scab, distinct though small achores are perceived, having the same circular form, but drying and forming in a few hours a small yellow scab, which is firmly attached to the cutis. The ring of pustules enlarges precisely in the same manner as that of the vesicles, but the contents of the pustules still drying, become attached to the margin of the scab already formed, and from day to day increase its bulk and diameter. The circular scab, dry and unyielding, becomes a source of increased irritation; and the pustules under its margin become enlarged and more elevated, they now cause the edge of the scab to be raised, and the cupped figure of the P. lupinosa and Teigne faveuse is rendered distinct.

That the contents of the pustules under the smaller scabs possess the power of inoculating with ringworm any part of the skin of other individuals has been proved in several instances by experiment; and I have also seen repeatedly, in the same family, different children showing the different conditions of the ringed incrustation, and the circular cupped scab, as well on other parts of the body as on the scalp.

The other form of the disease to which I

have alluded never assumes the circular figure just described: on the scalp it is pustular from the beginning, and marked during every stage of its progress by a much greater degree of irritation and itching. It is so generally diffused over a considerable space, even on its first appearance, as to warrant a designation founded on this feature, in contradistinction from the foregoing, which is so constantly circumscribed.

Like the latter, it appears to be readily identified with an affection of the skin of other parts, which is in part vesicular, but chiefly consisting of papulæ of different sizes. These not being of much importance, are usually little noticed; but as soon as the disease appears on the scalp, alarm is immediately communicated to the parents, or others connected with the children who are the subjects of it.

At this period much itching and irritation are found to exist. The pustules are very thickly dispersed over certain parts of the head, *every individual pustule having a hair growing through its centre*, and the scalp in the interstices being excessively red and inflamed. The child is feverish and irritable, the digestive organs evidently disordered, and a generally bad state of health will be found

to have existed for a considerable length of time.

The absorbent glands at the back of the head, and those of the neck, are enlarged and tender, and in some neglected cases have proceeded on to suppuration; but this is by no means common. Small abscesses form here and there, from the inflammation of the cellular membrane under the scalp, which, in a few days, discharge their contents, and heal; the spots which they occupied remain in some cases ever after completely bald, the adipose structure secreting the hair having been destroyed.

As the pustules become ruptured, and their contents distributed over the adjacent parts of the scalp, these parts become inoculated, the disease spreads, and yellowish scabs are formed, of an unpleasant odour and aspect, which, unless frequent ablution be had recourse to, rapidly accumulate.

This diffused or pustular form of porrigo, is chiefly found among children of dark hair and unhealthy constitutions. It is not attended with immediate loss of the hair, like the former; but this event takes place if the parts be frequently washed, in a short time.

From the greater quantity of fluid secretion occurring in this form, the power of in-

fection, and rapidity of extension, is considerably greater than in the circumscribed species. The manifest increased susceptibility to irritation of the skin of the individual also favours this difference: not unfrequently, however, under an improved state of the general health, and frequent ablutions of the part, assisted by sedative applications the disease subsides into a condition much resembling that first described; the hair exhibiting the same characters, and a very small number of pustules appearing at intervals amongst it.

The foregoing descriptions comprehend every thing essential to the history of porrigo (except as regards the P. favosa and P. larvalis) as it chiefly occurs in the better classes of society in England, when not of long standing, where cleanliness is particularly attended to, where no stimulating improper applications have been made instrumental in changing or aggravating its character, and where the general health of the patient is not too bad to admit of ready correction: and they will frequently, where strict attention to ablution be persevered in, terminate spontaneously. Under other circumstances, both the above forms are liable to terminate in that most obstinate and intractable one designated by Bateman P. furfurans, and ad-

mirably described by Alibert as Teigne furfuracee and amiantacee *. The pathological changes necessary to produce this condition are seldom brought about very speedily, but seem rather to be the result of long continued irritation. Its principal distinguishing feature is the copious production, and rapid exfoliation, of morbid cuticle. The branny form of this substance greatly favours its entanglement by the adhesive fluid of the pustules, and they speedily unite to form the cement described in the note referred to.

It will be observed, that in the commencement of the forms first mentioned, very little scurf is produced. A pustule forms, which breaks, and leaves a light scab easily separable; but the vessels which secrete the cuticle of the surrounding parts partake but little of the inflammatory action. In long standing cases, however, this inflammation ceases to be confined to the solid structure of the cutis, and to have all its energies concentrated in the formation of a pustule. One of its most important functions, the formation of its natural defence, the cuticle, becomes deranged: the latter substance is produced in

* See the note in page 75.

immense quantities, losing in strength and utility what it obtains in quantity, and contributing largely to that character from which this condition takes its name. The exfoliations of cuticle uniting with the contents of the pustules become the means of increased mischief, by matting the hair firmly together, and impeding the measures likely to be of use. The scalp cannot be cleared without great pain and difficulty. It is useless to attempt shaving, for the razor passes through this covering no more readily than through half dissolved glue, and the scalp is liable to be sliced and cut in every direction.

When by the use of warm water applied for a considerable length of time, and at the expense of some pain, the scalp is cleared and examined, it exhibits not only the erythematous redness and utter privation of cuticle described by Alibert, in the interstices of the hair, but a considerable enlargement of the passages, by which the latter find their way to its surface. The covering which the hairs receive from the cuticle is also destroyed, and in its place, partly filling up the enlarged orifice in question, a glutinous fluid may be seen exuding, and surrounding each individual hair. The quantity of this fluid which may be secreted depends much on accidental circum-

stances, and is greater at some periods than others. The proportion which it bears to that of the exfoliations of cuticle determines the consistence and adhesiveness of the covering of the diseased part; and hence, when small in quantity, the latter is more dry, harsh, and shining; a difference which, it will be seen, constitutes Alibert's T. amiantacee.

In this state of the disease, and also under all other circumstances, where the accumulated secretions are considerable in quantity, the term "Scalled head" is generally applied. It is also sometimes used with respect to the porrigo favosa, which will be more particularly described in another place. The extreme rapidity with which the yellow scabs of the latter accumulate may appear indeed to give it an equal claim to this designation; but it is much more easily removed, and usually, if cleanliness be attended to, terminates spontaneously. With the assistance of a little constitutional management, even in the worst cases, it is but of short duration. The idea attached to the term in its vulgar acceptation, moreover, is that of a disease of a tedious intractable nature, which rarely, if ever, terminates of its own accord. Its application, therefore, to the P. favosa is obviously improper.

On the subject of the causes of the different forms of porrigo but little requires to be said. With reference to the species first described as connected with the small herpetic ringworm of the skin of parts not covered with hair, I am able to state, that little, if any, constitutional derangement is discoverable at its commencement. In a great majority of cases, the infection can be very satisfactorily traced from one child to another, whether occurring in families or in schools; and it frequently spreads in the latter to a considerable extent, without any symptom of other disorder accompanying it. That it originates spontaneously in some cases is unquestionable, and the same remark may be made of the pustular form.

When the disease appears on the skin of an individual in the form of pustules, the constitution is importantly concerned; and, as has been already stated, the chief remedial measures will be such as are directed to the improvement of the general health.

The pathology of the disease has been very little understood, and in its treatment recourse has been had to an infinite variety of medicinal applications, not one of which appears ever to have been employed on known

scientific principles *. As might naturally be expected, the patience of the practitioner,

* It would be useless to trouble the reader with the detail of the particular effects of these supposed remedies, which, from time to time, have been earnestly recommended; for the majority of the best informed practitioners of the present day will be disposed to attach equal importance to them all; experience having taught them, that none have uniformly succeeded in producing a cure, or even temporary alleviation. As a matter of curiosity, however, it may be as well to enumerate them; and it may happen that some future cases, under particular circumstances, may be benefited by their use.

The ung. flor. zinci—ointment of the coculus indicus, in the proportion of two drams of the powdered berry to an ounce of lard—equal parts of sulphur ointment and soft soap intimately mixed, and used as soap in washing—ung. hydr.—ung. hydr. nitr.—ung. hydr. nitrico oxyd.—tar and sulphur ointments—ung. acidi nitrosi—lotions of solution of potash and of muriatic acid—ointment of calomel, acetate of lead and opium, of hellebore, turpentine, mustard, stavesacre, black pepper, capsicum, galls, rue, &c. Lotions of sulphate of zinc and copper, of equal parts of vinegar and oil —of oxymuriate of mercury, and of argenti nitras. The application of tinct. ferri mur.—blisters.

The whole of the foregoing have been noticed by Willan and Bateman; and Alibert seems to have a decided predilection for sulphur, both externally and internally, in this, as well as in all other cutaneous diseases.

In the fourth vol. of the Med. Repository, the use of common adhesive plaster to cover the spots of ringworm is strongly recommended by Dr. Clanny, as being capable of

and the friends of the patient, are in the end mutually exhausted; and the disease will often continue for years, under these circumstances, alternately improving and getting worse.

From the earliest periods to which its history can be traced, the alopecia, or falling off

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itself of effecting a cure. Messrs. Simmons and Bell in vol. xiii. of the Med. and Phys. give a similar account. In the fifth volume of the Repository, Mr. Bidwell speaks highly of stimulating applications, such as strong savin ointment, ung. hydr. nitr. with the addition of nitrous acid, and recommends occasionally varying these applications where any one in particular should fail in doing good.

In the 13th vol. of the Med. and Phys. Journ. a communication from Mr. Low rests chiefly on the efficacy of internal alterative medicines; but in the cases which he has detailed, it is evident that more than ordinary attention to ablution of the seat of the disease was had recourse to. In the succeeding vol. lotions of kali. sulph. are recommended by Mr. Barlow; and a subsequent page of the same vol. contains a terrific record of the effects of tobacco in the form of strong infusion to the scalp, to cure a case of long established scalled head, which will certainly act as an admonition to all who read it.

More recently, the periodical works, on general as well as medical subjects, have circulated a statement in favour of tan water, and water obtained from the gas manufactories, as lotions. The result of my own experience in such applications as the foregoing enables me to see as little prospect of doing any good with them, as hope of eliciting a sound principle of treatment from the chemical analysis of the matter of Tinea of the French chemists.

of the hair, has been constantly noticed; and it has been as uniformly observed, that where the part has been entirely divested of hair, the disease seemed to have disappeared. In the more advanced stages, such as those of Alibert, whose descriptions we have quoted, it invariably happens, that where by care and management the diseased secretions are cleared away, almost every individual hair will be found insulated by a pustule. That the irritation excited by this operation produces a more active inflammation of the skin, there is no doubt; and perhaps for a time it increases the number of the pustules, but the latter preserve their peculiar character, and are never seen beyond the margin of the hairy scalp *.

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* The observation of this fact appears to have led Dr. Underwood and others to the opinion, that a morbid state of the roots of the hair was the cause of the mischief, and hence we find them recommending the use of the pitch cap. Turner and Alibert both entertain a favourable opinion of it also, and in old standing cases there is no doubt that it has been of signal advantage.

Alibert, in his fourth article on "Les Teignes," after noticing the opinions alluded to, of the origin of the disease in the roots of the hair, attempts to prove that the part most importantly affected is the rete mucosum. He singularly enough selects his arguments from the history of his T. muqueuse (*the P. larvalis of Willan*, &c.) and remarks, that the occurrence of this affection and T. faveuse (*P. lupinosa*)

It is evident from these facts, that the hair is materially concerned in the production of the phenomena of the disease as it occurs on the scalp. In the first described form, we see it on other parts of the skin of mere ephemeral existence, either disappearing spontaneously, or removed by the application of any simple astringent. In the second, any sedative application, if combined with a light aperient, will be adequate to its removal: but if in either case the scalp happens to be affected, the disease evinces a considerable degree of obstinacy; and, as respects its management, becomes entirely altered.

The rapid formation of pustules, as they occur in old standing cases, may be satisfactorily traced to the influence of the hair on the part. The latter, in passing through this

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on other parts of the skin than those covered by hair, prove that the phenomena of all the forms of what has been termed Porrigo, or Teigne, depend on derangement of this structure. To say nothing of the doubts entertained by some of the best anatomists as to the existence of the rete mucosum, it will still be observed, that in a classification of the crusta lactea (or, as I shall designate it, Impetigo larvalis) with such a disease as that described in the preceding pages, shows but little attention to the ordinary rules of nosology. As far as I have been able to observe, no important analogy could be traced between them.

structure, irritated and inflamed, as it is become in effect so many extraneous bodies; and in this character each hair may be supposed to be very capable of producing suppurative action sufficient for the formation of a pustule. Their influence in the withered and blighted state first described, where no distinct pustules are perceived, is still of the same nature; thus continuing to aggravate, though not so extensively, the cutaneous inflammation constituting the original disease. When pustules are formed, they seldom penetrate the cutis, and never extend to the adipose structure secreting the hair; they cannot consequently be the chief cause of the destruction of the latter. Furthermore, the nourishment of the hair appears to be in all cases cut off, or materially interrupted, soon after the inflammation of the cutis is established. The manner in which the latter operates in producing this effect, would seem to be best explained by reference to the known effects of scarlatina on the hair. In scarlatina the cutis is for a considerable length of time the seat of great inflammation and congestion; the adipose structure, situated immediately under it, whose office it is to nourish the hair, is inadequately supplied with blood for this purpose; and hence the hair drops off to a con-

siderable extent, in all cases where the attack has been severe.

That this view of the pathology of the disease is correct, is proved by a variety of circumstances which occur in the history of almost every individual case. It would indeed appear that after a time its specific character and power of infection is entirely lost, and that it subsides into the mere effects of the irritation of extraneous substances on diseased parts.

The well known effects of the use of the pitch cap in eradicating it may be adduced as another fact supporting this opinion; for it is obvious that the extraction of the hair by the roots is the only effect which such an application is capable of bringing about, the direct result of this being the subsidence of inflammation and the disappearance of pustules.

I have had some opportunities of the post mortem examination of the scalp of subjects who have died from acute attacks of vital organs, while suffering from old standing porrigo, but have not been able to discover any thing like organic derangement about the adipose structure, or the bulbs of the hair beneath the cutis. Where the hair has dropped off, or appeared to have been extirpated by the disease, the adipose substance

was evidently wasted away in consequence of the long prevalent excessive irritation in the superincumbent cutis. In other portions of the scalp, where the surface had remained unaffected and the hair grew strong, no deviation from health in the parts beneath could be distinguished.

TREATMENT OF THE FIRST OR COMMON CIRCUMSCRIBED FORM.

On this part of the subject under consideration, it may not be amiss to revert to the opinions of Alibert, though the observations we shall have to offer will be somewhat at variance with them. He observes, that the different eruptions which appear on the scalp have a manifest tendency to the preservation of the animal economy, and that it becomes a matter of important consideration whether proceedings directed to the removal of the disease under consideration can be adopted with safety to the constitution. He states also, that cases have occurred where the disease has been suddenly suppressed, of the instantaneous appearance of more formidable affections of internal organs. In truth, his opinions appear to coincide with those of the older authors (some of whom he quotes as to

the suppression of long continued discharges) most completely.

When it is considered, however, that these observations are applied under a general head to all the forms of "Les Teignes," that is to say, to the crusta lactea, or T. muqueuse, a disease attended with excessive discharge and irritation alike with the dry and inactive forms which have been mentioned, and which spread chiefly by infection, it is obvious that they should be received with some modification. Undoubtedly the sudden suppression of the former would, if it could be accomplished, be followed by mischiefs to some vital organ; but, as regards all those conditions which have formed the subjects of the preceding pages under the head of Porrigo, I am able to state that slight attention to the general health is quite sufficient to avoid any bad consequences from the suppression of the local disease.

It not unfrequently happens that the conformation of the child who is the subject of it exhibits marks of great delicacy; that there may be glandular disease partly developed in different portions of the absorbent system; that habitual disorder of the digestive organs exists, occasionally becoming aggravated and leading to febrile symptoms, and great increase

of pustulation and discharge from the scalp. If such a state of things exist, common sense would point out the propriety of considering the amendment of the constitution previous to the adoption of decided local treatment. If any thing like hereditary disposition to phthisis can be traced, I believe there is danger in the removal of any cutaneous affection; and as regards the scalled head, or that state of porrigo where much discharge and scabbing has existed, I have observed many instances, when it has been suddenly removed, where consumption has appeared to follow as a consequence.

On the contrary, if no indications of a weak part in the system are to be traced, if the child's health is good, or can be made so by a little constitutional management, no mischief is to be apprehended, however speedily the removal of the local affection may be effected.

If no constitutional disorder be obviously present in the case of the form first described, that is to say, where the characteristics of the well-known ringworm of the scalp exist, whether accompanied or not by spots on other parts of the skin, the best and most effectual application is that of one of the undiluted mineral acids. Of the three, perhaps the preference may be given to the sulphuric; and I

have been accustomed, whenever a case has been brought to me in an incipient state, to direct the removal of the whole of the hair of the scalp by shaving, and then to apply this fluid lightly on every spot which could be discovered by means of a feather. It should be suffered to remain on a few minutes, and should be carefully spread over the whole of the diseased spot, and a few lines perhaps beyond its utmost boundaries. It usually produces a good deal of smarting, and a slight blush of redness on the surrounding cutis in a very short space of time; and when this is observed, a sponge dipped in warm water should be made use of to clear away what remains of the acid, otherwise it is apt to affect the scalp too deeply. When applied in the above manner, the cuticle is evidently destroyed by it, and the vessels of the diseased cutis are much excited. In a few hours a tolerably copious exudation of coagulable lymph is produced on the spot, which forms a scab more or less thick. No appearances are now observed of the circular spreading irritation of the original disease, and in a few days the scab dries and separates, and brings with it the remaining unhealthy hairs of the part. A bald spot somewhat reddened is now observed, the colour of which soon disappears, and new

healthy hairs begin to spring up and speedily cover the part.

This application may be resorted to with a certainty of eradicating the disease, in almost all cases where the health is good, and where the disorder preserves the chronic circular form. Even if there be a few pustules distinguishable within the areola, even it may be safely relied on.

It frequently happens, however, that when an attentive examination of the scalp has been instituted in the manner described, and the acid applied to every individual spot then appearing, the lapse of two or three days discovers others in distant or contiguous parts, which are apparently the results of the application of the infectious virus from the originally diseased parts before the acid was applied. No discouragement should be felt from this circumstance, for the application of the acid puts an immediate and effectual stop to their spreading. Frequent recourse should be had to ablution during the day, and on all convenient occasions, in order to clear away the contents of any minute pustules which may be formed, otherwise the extent of the mischief and difficulty of subduing it will be materially increased.

The manner in which the acid acts in the removal of the disease, may appear to be ex-

plained either by its excitement of a new and different action in the vessels of the surrounding part, by its destruction of those superficial vessels which were the original seat of the disease; or, by producing an adhesive scab which entangles, and when it drops off completely brings with it the hair of the part, the influence of which in keeping up the disease has been already described.

TREATMENT OF THE PUSTULAR OR DIFFUSED SPECIES.

With respect to the pustular and more diffused form of the disease next described*, it may not be amiss to premise, that any attempts to eradicate it by means like the foregoing, would invariably be abortive and mischievous. The state of the general health will, in most cases, require the first attention, and the local applications will be such as are most calculated to subdue irritation and promote cleanliness; to remove as speedily as possible the contents of the ruptured pustules, and prevent their drying on the part and matting the hair together, and thus increasing the local mischief.

On the subject of the constitutional dis-

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* See p. 112.

order, little need be said here; the cutaneous disease is one of the Protean results which follow various deviations from health in the actions of internal organs. In cases where infection from the other species could be traced, it has either derived its aggravated character from a general unhealthy disposition of the constitution, combined with scrofulous affection of the absorbent glands, or a preternatural disposition to irritability of skin. In many cases it has appeared spontaneously, where the child has been ill fed and otherwise badly managed; but it is also sometimes observed where these circumstances have not occurred. It is, however, by no means seen under such circumstances as would lead to the opinion of its having any salutary influence to exert, or office to perform in the animal economy, like what has been called the Porrigo favosa.

If the pustular or vesicular patches of eruption, mentioned as often occurring in conjunction with the pustules on the scalp, be numerous, and diffused over distant parts of the body, the warm bath should be used every evening, and the determination to the skin which is induced by the latter should be afterwards encouraged by putting the patient into a warm bed, and exhibiting some warm di-

luent drink. Such measures will speedily, when assisted by proper internal medicines, subdue the irritation of the skin on which they depend, and diminish the chance of the application of the virus to other parts.

If the slightest accumulation of the diseased secretions be perceived on the scalp, it is to be carefully removed, together with the matted hair growing on the spot, by means of finely-pointed scissors. Indeed the complete removal of the hair over the whole scalp is almost always requisite; for while it remains, the chances of the appearance of fresh pustules in other parts are very great. The more expeditious manner of removing the hair, recommended in the dry circular disease by shaving, however, is not here to be thought of, as it excites great inflammation, and produces so much pain as to render the child incapable of submitting to have it afterwards properly managed. The careful employment of finely-pointed scissors is free from these objections, and the hair may be removed quite as close to the scalp by them, as is necessary for all useful purposes.

When this has been accomplished, the best applications for the first few days will consist of ablutions by water, heated to the highest degree which the patient can bear with com-

fort. These are not to be employed merely as conducive to cleanliness, but as the means of subduing the excessive irritation of the scalp also; they should, therefore, be repeated several times in the course of the day, so as to keep the diseased parts constantly under their influence, and at the same time to clear away the irritating contents of the pustules as fast as they are discharged.

While this process is regularly attended to on the scalp, the internal management will require to be conducted according to the constitutional condition of the patient. It has been before observed, that in the larger portion of cases of this kind a debilitated state of system and very often mesenteric disease will be found to exist. To enlarge here on the medicines requisite to remove such a condition would be unnecessary; they are very well known, and require only to be judiciously selected. The best kinds of diet and regimen are also equally well understood, and laid down in books of authority.

As a tonic remedy, where mesenteric disease is suspected, I have been in the habit of administering the hydr. oxym. in doses of from one-eighth to one-quarter of a grain in tincture of bark three or four times a day, according to the age of the child. A few grains of

hydr. c̀ creta, with an adequate quantity of rhubarb, being used about twice a week.

It will, however, now and then happen that a full habit of body and apparently robust health accompanies the eruption, in which case the method of treatment will be as obvious as in the foregoing. In truth, existing circumstances, and the history of each individual case, are the only correct guides in the constitutional management.

TREATMENT OF CONFIRMED OR OLD STANDING CASES OF PORRIGO OR SCALLED HEAD.

Cases of this condition of the disease are much less common than formerly in England. This may be considered simply the result of the progressively increased means of comfort and cleanliness which the lower classes of society have experienced. With the exception of the Porrigo furfurans, or Teigne furfuracee, none of the forms described by the older authors, or by M. Alibert, are often seen in the more educated classes, and it seems proper to leave this for subsequent consideration by itself. As has been already observed, it is the form which those which have occupied the foregoing pages terminate in when of long duration, when subject to constant stimulating treatment, and where frequently repeated ab-

lution has not been thought of sufficient consideration during its progress.

The "scalled head," or that state of disease which it will be proper to consider as best entitled to this term, I should be disposed to describe as follows.—Diffused clusters of pustules, appearing in some cases on one part of the scalp only at a time; sometimes in the form of patches on different parts, and always accompanied by much inflammation and itching. When the pustules of one part have broken and discharged their contents, the inflammation subsides and some of the hairs appear to drop off. Soon after, other parts exhibit the same appearances, and the pustules follow the same course of increase, maturation, and decline; always, however, leaving behind them some inflammation and a little scurfy exfoliation. In the course of time the disease traverses every part of the scalp over and over again, and the consequence of these repeated attacks of inflammation is in the end a fixed inflammatory state of the cutis, which continues to produce at intervals over the whole scalp repeated returns of pustulation. During the whole period of its continuance, every individual hair appears situated in the centre of a pustule; while, if the hair on any particular spot happens to have been extirpated,

the pustules cease to appear. The vexatious disappointments, experienced both by the patient and practitioner from time to time, ultimately brings on despair of recovery from legitimate means, and the assistance of quacks is called in, often to render the mischief more serious and obstinate, it is true, but sometimes to the complete removal of the disease. The anathemas of Willan and Bateman seem to have completely exploded the use of the pitch cap, and every thing else acting as a depilatory; and Alibert, while he admits that nearly the whole of the cases he has seen recover have been cured by similar means, is also very energetic in its condemnation.

The first mentioned authors are of opinion that depilatories do more mischief to the scalp than the disease, if left to itself, will effect in years; but they have not made it appear how such mischief is produced by remedies of this sort. Is it supposed to be by retarding the growth of healthy hair on the part? It is plain that such is not the fact; for the adipose structure beneath the cutis, from which the hair derives its origin and support, sustains no mischief even if every hair in the scalp should be dragged out by the roots; consequently the growth of new hair is certain. Is it because the disease is aggravated, and a

greater number of pustules produced? No person, who will take the trouble of making the experiment, can fail to observe that the reverse of this is the case; for when the hairs are removed, pustulation ceases, and the inflammation gradually and sometimes rapidly subsides.

In this tedious and troublesome form of disease we have not a choice of remedies; fortunate, indeed, may it be considered that one should be known capable, if properly directed, of subduing it, or one principle of treatment found to be generally beneficial. The offensiveness of its external appearance, its seat being a part constantly exposed to observation; the total destruction of the chief ornament of the countenance, the hair, which it occasions; the horror entertained of contact by every person, together with the exclusion from places where education can be best obtained, make the majority of cases truly pitiable. It is for those who know not the distress and misery which tedious cases excite in the minds of sensitive parents, to speak unheedingly of the *horrible torture of extracting the hair from the diseased parts* as a means of cure. In truth, they must know very little of the mode in which this ought to be effected, and of the slight degree of uneasiness

attending it, to be able to think it improper or inefficient.

It is not the pitch cap, however, but a more discriminating application of the principle upon which this apparatus acts, which I am here desirous of advocating; and I am fully warranted in stating, that where the disease has been long established, and that state of chronic inflammation of the skin before described has taken place, the removal of the hair affords the only hope of recovery. In such a case, even if no cause existed to keep up the irritation, it should be recollected that the latter by its length of duration has become almost identified with the natural action of the part, and would require much time to subdue it. What then would be the difficulty when the additional excitement of extraneous substances is allowed to remain in full operation?

In the hospital of St. Louis cases remain for years without permanent improvement, and seem ultimately to get well without any obvious reason, unless the thinning or destruction of the hair be considered such*. Not unfrequently, however, they have re-

* Alibert himself affords exceedingly good evidence in support of these observations. He says, "I knew a man who was ignorant of our art, and who employed a topical appli-

course to the calotte*, as it is termed, of their own accord, and succeed in curing the disease. They are perfectly aware of the manner in which the calotte operates, and persevere in its employment with a great deal of patience and resolution till they have extirpated the hair.

The inconveniences of the calotte, however, are of a serious nature. In the first place, it is applied to the greatest part of the scalp, where perhaps no pustules may exist nor any inflammation have taken place. Under such circumstances the tearing it off must be horribly painful, as the sound hairs are adhering to it quite as firmly as those connected with the pustules of the disease.

The most judicious plan of proceeding is as

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cation, which he persisted in keeping secret, but which I nevertheless discovered had lime in it. He succeeded in curing seventy individuals in six months. The means he employed were very simple, he confined himself to rubbing the affected part with it (the scabs or scales having been cleared away by poultices). What happened? The *fallen hair* was replaced by more, first of a pale, then of a deeper colour. The disease was cured." He mentions a variety of other applications which have often been had recourse to here without effect.

* A plaster made of strong vinegar, rye, meal, and pitch, which is spread while hot, and applied in the form of a cap to the head. After remaining on three days it is torn off with violence, bringing with it great numbers of hairs by the roots.

follows.—The hair over the whole scalp should be carefully removed by scissors, the razor not being admissible on account of the irritation which follows its use. When pustules are discovered, poultices should be kept applied during the night, not so much for the purpose of subduing irritation, as promoting free suppuration round the roots of the hair, and thus loosening their connexion with the cutis.

They will in this state be found to come away very readily, and with little or no pain to the patient, on the application of a pair of forceps. The latter may be broad at the point, if the pustules are very numerous, and the operation will be found neither one of pain to the patient or much tediousness to the operator. Any person may be instructed how to perform it, and a short space of time occupied in it every morning will soon enable us to discover an important improvement. If followed up with attention and perseverance, it will rarely fail to subdue the disease, and to be followed by new and healthy hair.

In conjunction with the above management, the frequent application of spirituous evaporating lotion to the scalp, where the hairs have been removed, will be found of signal advantage. During the day it ought not to be omitted for any length of time, and is well calculated to subdue any little increased

irritation which the extraction of the hair may have produced.

The constitutional treatment, as in other cases, must depend on the apparent state of health of the patient. Good general health ought to be secured by appropriate remedies before the above plan of local treatment be instituted, otherwise impediments will be likly to occur to its continuance. A robust or full habit of body is however as unfavourable as an opposite state, if the latter approach to any thing like debility. Stimulating diet and wine should at all times be avoided, as being liable to bring on increased itching and pustulation.

The disease, as I have observed in repeated instances, becomes suddenly aggravated by attacks of fevers, particularly those of such kinds as children are most subject to, as scarlatina, measles, mumps, &c.; during the continuance of any of which, it will of course be impossible to pursue the treatment above described.

TREATMENT OF THE PORRIGO FURFURANS.

The description of this form of the disease given in a preceding note*, is suffi-

* See p. 78, 79, 80, &c.

ciently correct to render it unnecessary to solicit the reader's attention to any thing further relative to it than its treatment; for although Alibert, Willan, and Bateman, have described it as always originating in the form of pustules mixed with a superabundance of scurf; the most unmanageable cases, and these are by far the most numerous, are those which are preceded by the bad management or neglect of one or the other of those already described, or of perhaps a tedious case of pityriasis. The accidental occurrence of disturbance of the system, or of some eruptive disease, while a scurfy state of the scalp has existed, has been indeed in several instances which I have observed the apparent foundation of the disease in its worst form.

A very superficial view of the part on which it is situated will enable us to see that local applications afford little chance of benefit, the compactness with which the hair is matted together by the mixture of scurf and adhesive fluid secretion prevents a possibility of the cutis being affected by them, while the apparent state of system leads us to no indication which may be of service through the medium of the constitution.

There are various confident statements on record as to the effects of particular applica-

tions (one instance is that of Dr. Hamilton, brought forward by Willan, respecting the coculus indicus used as an ointment), which a diligent trial of has been uniformly followed by disappointment.

In private practice, now for some years tolerably extensive in this class of diseases, I have seldom found the parents or friends of the patients sufficiently persevering to preserve the scalp free from the accumulation of scurf and adhesive secretions, to allow of the fair and full influence of local applications; but where this desirable point can be attained, considerable benefit will arise from sedative cooling lotions, provided these are employed diligently, and assisted by the judicious use of mild alteratives and aperients. I must in candour, however, confess, that except where the operation of plucking the hair from the diseased part has been diligently followed up, and every other possible means taken to check inflammatory action, a perfect restoration to healthy action has seldom been produced.

In a few cases these measures have been followed by complete success; but the majority have, from the circumstances mentioned, been ultimately resigned in despair. It is a curious, though very consoling fact, how-

ever, that a spontaneous disappearance of the disease occurs in nineteen cases out of twenty, before the age of puberty arrives.

My experience of the last fact has hitherto deterred me from the use of the lime ointment, and some other severe applications, mentioned by Alibert and others, with the view of eradicating the hair, the possible mischief which may arise under their employment being more than sufficient to justify us in waiting for such a result. I have been, moreover, frequently consulted by the friends of children, who have been sufferers for many years, and who, finding little relief in this country, have been actually taken to Paris for the purpose of being submitted to the care and treatment of the French professors. Among a great number of these, I have not yet heard of one who derived any advantage from their treatment.

SECTION II.

On diseases chiefly marked by chronic inflammation of the vessels secreting the cuticle, producing morbid growth of this structure, and generally dependent on debility of system.

CHAPTER V.

LEPRA.

THE most important and most common of the diseases coming under this head, is Lepra.

Many preceding authors on the subject of cutaneous diseases have experienced considerable inconvenience in speaking of Leprosy from the confusion of the older writers, who seem to have applied the term to endless varieties of disease of the skin, which do not appear to have the slightest resemblance to that which is properly so named.

In England, Turner, Willan, Bateman, and other authors, have laboured successfully in

clearing up the difficulty; and Alibert, though still retaining the term in connexion with his description of Elephantiasis, is not unaware of the material difference between the latter and the true Lepra.

An attentive perusal and consideration of the descriptions of diseases of the skin, which are to be found in the works of ancient authors, leads us, as in most other subjects of scientific research, to the conclusion that but little really valuable practical information had been obtained by them, either as regards their diagnosis, pathology, or treatment. In the case before us, the details of the worst forms of all diseases of the surface appear to have been constantly selected as the foundation for a description of Lepra, as if the latter comprehended only what was disgusting or terrific in appearance, or incontrollable by any known scientific means. Hence it is, that Heberden and Cullen have spoken so strangely of it, each of whom declare their disbelief of its frequent occurrence. Alibert also observes, that it is not often seen within the circle of his observation, though a more careful perusal of his works would certainly lead us to an opposite conclusion. In truth, this author, as will appear on further consideration, has in some measure followed the example of the ancients;

for he applies the term to severe cases of other diseases, while the true Lepra is found buried beneath a mass of incongruous matter under the head of Dartres.

By a strange misunderstanding, probably arising from the circumstances above mentioned, Leprosy has been confounded with Elephantiasis; no two diseases of the skin, however, can possibly be less alike. The disease of the cutis which exists in the latter, moreover, is of infinitely less importance than that of other and more deeply seated parts, in making up the characters of this malady, and partakes but little in the diseased actions which give it its distinguishing feature, viz. enormity of growth. Notwithstanding what we have above remarked, a sufficiency of evidence appears to have been extracted from the confused mass of materials alluded to, to justify the opinion, that by the term Leprosy, a disease of the cutis only was originally meant, terminating sometimes, perhaps, unfavourably in unhealthy sores, or spreading sloughy ulcerations, marasmus, and decay of mental and bodily strength; but in the majority of cases, where cleanliness may have been attended to, in a slow and gradual return to health.

The abhorrence in which the unfortunate subjects of Leprosy were held by their fellow creatures in the earlier periods of history affords no argument against this comparatively light view of the disease. It should be recollected, that in those unenlightened times, the power of infection was supposed to be vested in any person, however slightly affected; and that, besides, inasmuch as it prevailed chiefly among the lower classes, it would necessarily be considered as bringing with it as much of disgrace as of misfortune. In addition to these considerations, the connexion which the sacred writings seem to have established between the general prevalence of the disorder, and the incurrence of the divine wrath by the people, would have led the latter to the exclusion of lepers from their society, even though the disease, pathologically speaking, may have been exceedingly trivial.

In describing the disease as it is now seen in this part of the world, it is certain that we shall be obliged to employ language materially different even from some modern authors to whom we have alluded; and indeed there seems to be little doubt that almost all diseases of the skin are less frequently occur-

ring, and less formidable and disgusting in their external characteristics here, than those observed among our continental brethren *. Even in this country, however, and under its mildest form, Lepra is troublesome and tedious in its course, and attended with much unsightliness and irritation. Changing, when for the better, in a manner the most slow and imperceptible, and not unfrequently accompanied with a proportionate degree of despondency and mental distress.

In the description of Lepra, it has been customary to divide it into three species; Willan and Alibert have both adopted this plan. The former employs the terms L. vulgaris, L. alphoides, and L. nigricans. The latter has La lepre blanche, L. noire, and L. Tyrienne, as varieties of his Lepre squamueuse. His descriptions of Lepre crustacee and tuberculeuse, apply to what we better know as varieties of psoriasis, ecthyma, rupia, &c. and Elephantiasis; and will obtain

* Alibert, in alluding to Dr. Willan's account of Leprosy, observes, "M. Willan dit avoir observé plusieurs espèces de Lèpres en Angleterre, mais ces lepres ne sont autre chose que des dartres, auxquelles cet auteur a impose des nommes qui ne leur conviennent pas," a mistake which the above observation probably explains.

attention in another page. With reference to Willan's terms, it may be necessary to observe, that his two first species are merely different degrees of the affection, or different stages of its progress, while the L. nigricans, that designated by Alibert as L. noire, is the result of a scorbutic state of the system operating in combination with the ordinary causes of the cutaneous disease.

It appears to me, that to describe Lepra in the simplest and most correct form, these terms are not at all necessary; that they may therefore be dispensed with with advantage, is obvious, inasmuch as they have had their share in creating the confusion elsewhere alluded to, and discouraging the student in the prosecution of his inquiries. It is to little purpose that preceding authors have expended so much time in investigating the confused records of ancient times, to determine what was meant by the term, and to ascertain the correct history of the disease, if new difficulties in its study are to be invented by incumbering it with useless and multiplied names.

The understanding in which the term is at present received is that of a disease exhibiting, on superficial notice, red inflamed patches,

from which extensive and rapid exfoliations of scales of morbid cuticle are constantly taking place, but on which no appearance of vesicular or pustular formation ever occurs. Dr. Willan thinks it is sometimes caused by indurated papulæ originally springing from the true skin, and which, by their elevation and extension of the cuticle, produce some injury to this structure. This is, however, probably mere matter of conjecture, as the eruption of Lepra is rarely, if ever, preceded by diseases of a papular kind.

It is impossible to confound this disease with the scabs formed by the exsiccation or drying up of pustules or vesicles, if any attention be paid to it at its commencement. It is not meant by this assertion to deny that such mistakes have occurred, as stated by Dr. Willan; for in truth it may be asserted of almost all cutaneous diseases, that the eye of the careful pathologist has not been directed to them till very lately; and we are not therefore to be surprised at their having been so little understood by ancient writers.

The appearance which Lepra assumes at its commencement is that of round red spots, elevated above the surrounding skin, and generally not larger than a split pea. If the finger be drawn over it, a degree of stiffness, or absence

of the natural flexibility of the skin, is distinctly observed. In a day or two, if a minute examination be instituted, the spot is found to have a glossy, hard surface, a perfect semi-transparent scale having been formed, the surface of which is smooth and polished. In a short time this scale separates; when the site which it occupied exhibits no variation of colour, but a considerable degree of roughness and irregularity. The examination of the inner surface of the separated scale enables us generally to discover in or about its centre a minute protuberance, considerably softer than its bulk, and which has evidently occupied a corresponding hollow or excavation in the denuded surface. If force has been used to separate the scale, a speck of blood usually occupies this excavation, and the point described as the centre of the inner surface of the scale is also similarly discoloured. As the diseased spot enlarges, fresh scales are produced, but these are entirely dry, and do not exhibit the appearances on their inner surfaces which belong to the original scale of the incipient disease above described. Neither are they found uniformly to extend over the whole diseased spot, in the form of one continued scale; as in this state, they separate partially and in

patches, their dried edges giving a whitened, scurfy appearance, in some situations, where they are partially detached.

As the number and size of the spots increase, the limb, of course, becomes gradually incased in a shield of scale; and those in the neighbourhood of joints consequently become very troublesome, producing a considerable restraint on the motion of the parts.

There is one circumstance peculiar to this disease, which has been particularly mentioned to me by the patient, namely, a sensation of pricking, most frequently noticed a little before the separation of the first scale, when perhaps it has scarcely attained the size of a spangle. I am inclined to think this sensation the consequence of the raising up of the edges of the scale, produced by the tumefaction and elevation of the inflamed margin, and fresh growth of scale; the centre which was attached to the cutis being thus forcibly torn from such attachment. This conjecture is rendered more probable by the fact, that when the disease is obviously subsiding, when no new scales rise up, and thrust those which were before formed from their attachments, the pricking in question is no longer felt.

In cases of long standing, and which have

been much neglected, the glands secreting the nail are sometimes affected by the diseased action; in consequence of which, the formation of these appendages of the cutis is incomplete, and they exhibit appearances at their roots resembling the deposit of specks of matter in their substance. Sometimes, also, they act as extraneous bodies on the parts to which they are appended, producing much aggravation of the irritation, and a fluid discharge. I believe these appearances, however, are not common in cases originating in this country.

The elevated character of the spots, both at the commencement of the disease, and during its progress, is partly given to them by the morbid layer of cuticle forming the scale, such elevation being evidently less striking when the surface is cleared from this incumbrance. I think the remarks of Willan and Bateman, as to the non-accordance of the cutaneous lines on the diseased surface with those on the adjoining healthy skin, are incorrect in the majority of instances.

The parts of the body stated to be the most frequent seats of Lepra at its commencement are the arms, fore arms, and legs, from whence it extends to the trunk of the body, and sometimes to the head. When

the latter circumstance occurs, like all other affections of the cutis extending to, or occurring in this part, it undergoes some change of character, dependent on the irritation of the hair, and is attended with a fluid discharge. The scabs cease to assume the circular form, and the substance of which they are formed falls off in detached portions, having something of the appearance of dirty mortar. The fluid exudation becomes the cause of a more ready separation from the skin of the diseased secretions, and if the scalp be examined, it will be found of a red and shining appearance; the inflammation is, however, found to exhibit the same characteristics of a chronic form as are perceived on the skin of other parts where the scales are detached.

In tracing the progress of the disease on parts not covered by hair, we perceive that in a day or two after the first described minute scale has become detached, a dull red areola of inflammation is formed, which extends a line or two beyond the site which the scale occupied. In two or three more days the diameter of this areola is increased and other scales are formed in the centre, which either gradually dry, turn up at their edges and drop off, or increase in size, and still preserve the circular form. When the spot arrives at the

dimensions of a silver penny, the red margin of the cutis surrounding the edge of the scales is observed to be distinctly elevated; and by the closeness of its adhesion to the latter, sometimes presents the appearance of a continuous surface. This appearance continues as the disease spreads and obtains strength, and the scale manifests no disposition to detach itself till it has covered a great portion of the limb.

If the scales in the centre drop off freely, which usually happens if the general health is improved, this part of the diseased cutis manifests a disposition to healthy changes; though still of a darkish red hue, it ceases to produce the hard dry scale as at first, but in the course of every three or four days a slight transparent film is formed, which is easily separated. Under these circumstances also the rapidity of extension from the margin gradually diminishes, the redness becomes of a more florid hue, and the scales are lighter and more speedily detached. This state of the parts is usually the harbinger of a rapid recovery from the disease, and it is evidently the result of an invigorated action of the cutaneous vessels. The lighter hue of the diseased part is usually followed by the disappearance of the elevation of the cutis at the

margin, and the scales soon become of the same character here as in the centre. Eventually, they assume the appearance of scurf, and the skin regains its natural colour.

If, on the other hand, the habits of the patient be not such as are conducive to health, if a depleting system of treatment be had recourse to instead of the reverse, or if the constitution should be marked by original debility, the disease may be expected to take one or other of the following unfavourable courses.

The incrustations continue to increase in circumference, or to spread irregularly over the adjacent parts. In the course of time many of them become so dry and hardened as to irritate the cutis beneath, when much pain and tenderness is experienced and matter is formed, and perhaps confined for a considerable length of time; the margin of the scale is imbued with a dark-coloured sanious fluid, similar to what is described elsewhere as surrounding the bases of the scabs of Rupia. The disease loses its chief characteristic of a dry incrustation, and an unhealthy ulcerative process is commenced, by which the scale is as it were undermined and detached. In this state of things, the appearance presented is that of an excavated unhealthy sore with a white

sloughy surface and elevated edges, the latter preserving the dark-red colour it obtained from the first appearance of the disease. From day to day other spots make their appearance, which spread in the same manner as those preceding, till a large portion of the surface is occupied by the disease, and the case becomes truly deplorable.

In the greater number of cases, however, the rapidly increasing marks of constitutional debility, as the disease proceeds, establishes the conviction of the necessity of tonics and better living, both in the minds of the patient and medical attendant; and hence this ulcerative stage of the disease is seldom seen. It nevertheless frequently occurs in different parts of the continent, where poverty and inattention to cleanliness are more prevalent than in England; and I have seen it repeatedly in the impoverished class of labourers who have been compelled to apply for parochial relief from ill health or want of employment.

In the better classes of society, where great debility has been brought on by sedentary and studious pursuits, by continued anxiety of mind, or by great bodily exertion and privation of rest, the scales are not followed by ulceration or fluid discharge, but

they spread to a great extent, then separate piecemeal, and are followed by others. When one spot has returned to health, the disease appears and pursues the same tedious course in other parts, thus continuing for years, unless the pursuits or circumstances of the patient are materially altered.

I have already alluded to the black leprosy, or, in other words, to the disease as occurring in scorbutic habits. I have known the dark hue from which this variation takes its name arise in the common Lepra of long standing in one or two cases, but it usually accompanies the eruption at its commencement. It has not, to my knowledge, been traced through its course by any author who has noticed it, and I hope to be able to supply this deficiency.

I believe this state of Lepra is never seen without strong marks of want of energy of system, accompanied by torpor of bowels and sallow unhealthy complexion; there has been a manifest connexion between these symptoms and the cutaneous affection, at least in all cases which I have observed, and the termination of such cases have clearly showed such connexion to be that of cause and effect.

The spots of the black leprosy are the same in figure as that already described. They originate in the same manner by a small

scale, which falls off, leaving a blue or blackish spot, which slowly increases, preserving its circular form, and is covered by scales considerably less thick than the former. As the disease traverses the surface, its course is marked by the dark hue which it leaves behind; but on this dark-coloured skin, after one or two layers of crusts have been detached, the production of this substance ceases, the surface becomes shining, and feels soft and swollen. In some parts the skin is more raised than in others, and there is a feeling communicated to the finger resembling that which a small quantity of fluid would give if confined beneath the cutis. In a few weeks the most prominent of these soft discoloured parts give way, and a little orifice is formed, through which a sanious thin fluid escapes; and if this orifice be examined by a probe, the cutis will be found undermined and completely separated from the cellular membrane beneath to a considerable extent, sometimes indeed as far as the discolouration extends. The orifice rapidly increases in size till the discoloured cutis is pretty nearly all removed, when the disease presents the appearance of a common unhealthy sore with dark-coloured inactive edges. This stage or condition of the disease is not very often seen,

and is chiefly confined to the lower extremities.

The causes of leprosy, as it occurs in England, have been considered very obscure. To some authors it has appeared to be produced by the application of dry, irritating, or caustic substances to the skin, and by want of cleanliness; while others have noticed this opinion only to oppose it, and to assign others of an equally local influence. Local causes, indeed, appear to have been sought after, rather than such as may depend on the state of the general health of the patient; but it is evident that this view of the subject must be in the great majority of cases incorrect, since the disease is observed to occur most frequently in this country on the skins of individuals not subject to the imputation of neglect of cleanliness.

There is no part of the civilized globe, to which historical research on medical subjects has been directed, where evidence of the extensive existence of Lepra has not been obtained *; but a comparison of the statements of authors, as regards the degree in which it is found to prevail in different parts of the

* Vide Précis Theorique et Pratique sur les Maladies de la Peau, par M. Alibert, page 5, tom. 2, 1818.

world and in different ages, clearly demonstrates that in proportion as civilization has advanced, and as commerce has extended its benefits, its frequency and severity have become diminished. The connexion of cause and effect, which is here manifested, admits of ready explanation; civilization gives that excitement to the mental powers on which the healthy performance of the animal functions are known to depend, while the facility with which linen may be every where obtained, prevents that neglect of cleanliness which favours the progress of every form of cutaneous disease.

The hereditary origin of leprosy, as well as of some other scaly diseases, has been frequently spoken of; but I am compelled to withhold my belief, that any thing beyond a certain dryness of the cuticle, dependant on the original formation of the cutis, can be communicated in this way, though such dryness and disposition to crack and form a species of Psoriasis may be much aggravated by accidental circumstances, and produce scales similar both to those of this disease and of Lepra. In parts of the world where cretinism prevails, leprosy is almost constantly observed; and owing to the other disgusting appearances which these outcasts of the hu-

man race exhibit, it is vulgarly supposed, like this degeneration of the species itself, to be hereditary. Under such circumstances, however, its causes may be much more satisfactorily referred to the hardships of its miserable subjects; for there can be little doubt that filth and idle habits are at all times capable of acting as powerfully exciting causes. "Hereditary diseases do not naturally and necessarily attend the human race; leprosy, madness, gout, scrofula, &c. spring out of certain practices, they were all acquired, and probably will be eradicated. Leprosy, originating in want of personal cleanliness, has already given way to improvements which have taken place in that respect. Linen is now substituted for woollen in many articles of dress, and other regulations equally friendly to cleanliness have caused leprosy almost to disappear *."

Diseases which somewhat resemble Lepra and Psoriasis are, as I have before observed, sometimes noticed in young people, particularly females, in respectable circumstances in life, whose parents at the same age had been subject to similar affections. A light complexion, and peculiar harshness of the skin, exist in such cases where the latter is sound,

* Dr. Jarrold.

and the scaliness and disposition to crack and form fissures is usually most troublesome in parts exposed to the drying effect of the atmosphere, as on the arms, hands, &c. In other parts of the body, as the edges of the arm-pits, &c. if the cuticle be minutely examined, it will be found extremely delicate, and easily irritated by the friction of the clothes, while the palms of the hands are horny and dry, and presenting none of that moisture and smoothness which belong to the part in the healthy state. The causes of these affections seem to consist in the original formation of the skin, and there is little or no ground to expect benefit from medicinal treatment: the history of such cases, however, is consolatory; for as the age of the patient attains maturity, and the constitution assumes the energy and stamina of the adult, the powers of the circulation become more adequate to the regular and healthy nourishment of every part of the body, and a sounder and stronger cuticle is formed.

As regards the precise state of system under which Lepra first makes its appearance, it may be observed, that medical men are in the majority of cases precluded from obtaining positive information. The disease has usually made some progress before it

comes under their observation, and the state of system existing at this period may be materially different from that formerly existing; it should not, therefore, be set down as that in which liability to the disease naturally exists. Diseased actions in other parts of the body will go on even to the destruction of life, without the continuance of the cause which originally excited them, and why should they not do so in cases of Lepra?

Some time since I had an opportunity of observing it in a stout corpulent man of forty, who had suffered from it at intervals from his boyhood. In early age, he had been of delicate health and subjected to hard labour and much privation; as he approached manhood, the additional exertions which a wife and increasing family exacted from him, with the anxiety of mind consequent thereon, produced a considerable aggravation of the disease; and he has observed, that as his circumstances varied and his mind was more or less at ease, his disease has been more or less troublesome.

On the subject of its communicability by contagion, it is not necessary to say much. It is clearly a mistake originating with the older writers, who confounded it with other affections of a materially different character.

In some instances, it is stated to have been produced by particular kinds of food and drink "which operate through the idiosyncrasy of individuals," but such cases must be of rare occurrence. None which have hitherto come under my observation have been of this kind; indeed it is obvious that the time usually occupied in the production of the first and most minute leprous scale, is much greater than can be supposed compatible with the transient operation of substances passing the stomach and bowels in the form of aliment.

The results of long and carefully conducted inquiry into the etiology of Lepra have completely convinced me of its connexion with, if not entire dependance on, mental and constitutional causes. Of twenty cases of the disease which have come under my observation within the last few months, no more than four have been individuals who could be subjected to suspicions of inattention to cleanliness, and these even were persons whose history was that of misfortune and disappointment, accustomed up to a recent period to better and easier circumstances. Unaccustomed privations and mental distress were the immediate precursors of the cutaneous disease in such cases; and during the time these were experienced by the unfortunate

individuals alluded to, no change appeared to be brought about by any medicinal remedies. The result of a system of treatment calculated to ameliorate their condition, viz. a liberal allowance of animal food, porter, &c. and means of active healthful employment, was a speedy return to health and vigour of constitution, and the extinction of the cutaneous disease.

In this metropolis Lepra is certainly very prevalent, it is even more common than Impetigo. It is not seen among persons in affluent or independent circumstances to any considerable extent; and when a case does occur in this class of society, it is only as a sequence of some other disease, where depleting remedies to a great extent have been had recourse to, or where studious and sedentary pursuits have been followed to the exclusion of proper exercise and nourishment.

The class of persons who appear to be most subject to it are those whose minds are anxiously occupied by the cares of business or study, or who are accustomed to bodily exertion beyond what their strength enables them to bear. A young medical man had succeeded to the business of his preceptor, in a populous district in the country: though every way competent, by several years' attentive

study to discharge his duties in this situation; he found himself obliged to compete with others perhaps equally able to practise their profession, and that his hopes of success must depend for their realization on no ordinary efforts of his own. A wife and increasing family added not a little to his anxiety, and being of an originally delicate constitution, his health and strength became impaired by the extraordinary efforts he was called upon to make. Under these circumstances the disease first appeared.' I give this case in as abbreviated a manner as possible; it is, however, a mere recital of many others which have been brought under my notice, the history of the subjects of which does not differ from it in any material degree *.

A gentleman lately consulted me, whose

*. Notwithstanding the examples placed before me by other writers, more particularly by Alibert and Rayer, I forbear to be more diffuse in the recital of any particular case; for though the high opinion of the value of such details entertained by some may be correct as regards a few internal diseases, they are worse than useless in those of the surface; where every thing is distinguishable by the naked eye, and the characteristic symptoms are in no case very equivocal. In the works of the authors alluded to, the expense to the reader is increased, and the value perhaps diminished.

habits in many essential respects were materially different from those of the individual last alluded to. He was not accustomed to hard and laborious exercise, as riding thirty or forty miles a day on business, nor was he anxious about future prospects. His present means and income were more than equal to all his wants, and derived from a source not liable to fluctuation and uncertainty. But his inclination for study and sedentary pursuits led him to neglect ordinary precautions against disorder of his general health. He spent too much time over his books during the day to enable him to take proper exercise, while he encroached very largely on the proper hours of rest during the night, in his favourite pursuits. An inactive state of the bowels, sallow complexion, loss of appetite, and other symptoms denoting great disorder of the general health, which were immediately attributed to neglect of exercise, led him to the opposite extreme; and he determined incautiously on hard riding, and other violent exertion, which he followed with much resolution for a few days, till the leprous spots made their appearance. Shortly after this, I had an opportunity of seeing him; and I was given to understand, that in the course

of ten days more than forty spots had made their appearance, some of which had arrived at the size of a shilling.

The proper treatment of this case, and that previously detailed, and in fact of all others, is nearly the same: attention to the general health, and the invigoration of the constitution, seemed to be the chief means by which the cure was brought about.

I have never heard of an instance of the disease making its first appearance on the skin of a stout, muscular, healthy man, though, as I have before observed, it has sometimes continued beyond the adult period, where difficulties and uneasiness of mind have existed on the part of the patient, having first appeared at the age of from sixteen to twenty, under depreciated health, and impoverished circumstances.

The pathology of lepra is by no means obscure. Its first appearance on the skin is accompanied by amply sufficient proofs, that the seat of the inflammatory action of which it is constituted is chiefly, perhaps entirely, situated in those vessels of the cutis, whose office it is to secrete the cuticle. The nature of this action too is sufficiently clear, and is evidently of a chronic kind, as is proved by the dark red

hue of the spots, compared to most other eruptions; and by the absence of tenderness or smarting, which is usually observed.

Unless the state of the general health of the patient be greatly impaired, it will be difficult to discover any more important deviation from the natural action of the vessels of the skin than that in question; but where a scorbutic diathesis has been induced by privations of nourishment, and other hardships; and ulceration has followed around the margins of the scaly spots (a case not uncommon among paupers who have known better circumstances), the disease loses the characters of lepra, and becomes what may be more properly termed scorbutic ulcer. In this state of things, the cutis is speedily perforated, and the cellular structure beneath suffers to a considerable extent from ulcerative absorption. When cicatrization afterwards takes place, it is slowly accomplished, and leaves behind it ugly scars, which seldom disappear; an effect which does not follow the leprous scales in ordinary cases of the disease.

The principles on which the treatment of leprosy is to be conducted, will be easily perceived from the foregoing observations. Dr. Bateman observes, "that there is no one remedy, nor any invariable plan of treatment,

which will succeed, under all the circumstances of its appearance, in different instances;" and he adds, that the different degrees of cutaneous excitement, or inflammatory action, which accompany the disease in different habits, afford the most important guide to the successful application of remedies. There is, however, but little variation in these respects in any case, for the cutaneous disease invariably shows the languid, inactive state of the cutaneous vessels, which has been described. It is at no period attended by an active state of inflammation, or great excitement; and always admits of the use of certain local stimulating applications, hereafter to be noticed, with advantage.

Dr. Willan, after noticing the practice of the Greek physicians, as respects the use of strong purgatives and bleeding, and the local application of a variety of remedies, some powerfully astringent, others corrosive or vesicatory, and others again remarkable only for their utter inertness, proceeds to the detail of the opinions of other authors, on the Bath, Harrowgate, Croft, and Moffatt waters, applied externally or internally, which appear in some cases to have been of service. As external applications, he notices the ung. hydr. nitrat. a solution of hydr. oxymur. in alcohol,

and tar ointment. He informs us further, 1st, That antimonials, sulphur, and nitre, have not alone any considerable efficacy. 2d, That decoctions of emollient herbs, of guiacum wood, sarsaparilla, mezereon, or elm bark, by no means deserve the character of specifics. 3rd, That salivation produced by mercury in any form does no good, but *that a spirituous solution of the oxymuriate of mercury in small doses, if continued for a length of time, is very useful.* 4th, That the nitrous and muriatic acids have been given for months without advantage in many cases, while others appeared to do better by the use of the aq. kali puri, in doses of twenty or thirty drops exhibited thrice a day.

Fowler's solution also, according to this author, is capable of curing the disease; and I have been accustomed to exhibit it till within the last few months, in conjunction with bark and other tonics, as I believed with considerable success, but more recent observation has convinced me that the vehicle in which it was exhibited, combined with the effects of a more nutritive diet, has had more to do with the cure than the arsenical solution. I do not, however, mean to deny its powers, even when unassisted by tonics of more established character, of inducing a more

energetic action in the cutaneous vessels than exists in any form of lepra which I have observed; and it is entitled, therefore, to consideration, where other tonics and better living fail in the desired effect.

The solanum dulcamara, or bitter sweet, has been reported to possess great power also in the management of the disease. It has been used in the form of decoction externally as a lotion, and has been exhibited internally at the same time *, the strength of the decoction being one ounce of the vegetable to a pint. On the effects of this remedy I am unable to speak very fully, having formerly tried it without the least success: I vainly sought for encouragement in the reports of others, and I am in candour compelled to say that I have never heard of a well authenticated case where it has been of service.

Alibert, on the subject of the treatment of this disease, has summed up all his remarks, and arranged them under three heads, comprehending 1st, Vues † générales sur le traitement des lèpres. 2d, Un traitement interne employé pour la guérison des lèpres. 3. Du

* See Dr. Crichton's Communication to Dr. Willan on Cutaneous Diseases, p. 145.

† "Sur les Maladies de la Peau," tom. ii. p. 97.

traitement externe employé pour la guérison des lèpres. When it is considered, however, that what he has here said is intended to apply alike to the leprosy properly speaking, and to the varying forms of elephantiasis, but little confidence will probably be conceded to it. He mentions the waters of Barege and Tivoli as sometimes efficacious, and notices the observation of Dr. Willan, Dr. Girdlestone, and others, on the use of the tincture of cantharides, arsenical solution, &c., also those of Dr. Crichton on dulcamara, but without adding to or lessening the importance of their observations, by adducing the results of any experience of his own in the remedies in question. The remainder of this part of his subject is occupied by an irregular mention of other medicines, or local applications, which have been already alluded to, and tried here in numberless instances without success.

It is evident, from the perusal of these different authors, that the dependance of lepra on constitutional causes has been much overlooked; and hence local applications have been considered as the chief remedial measures within our power. This oversight probably admits of explanation. I have already stated that the majority of cases which come under our observation in this metropolis are

in subjects of the middle or better classes in life—a class in which debility, arising from common causes, would not be expected; but it is nevertheless true, that the studious and sedentary, and the anxious and laborious, more particularly if of originally delicate constitution, breathing as they do, from week to week, and month to month, an atmosphere like that of London, even though they should take with an appetite an ordinary quantity of food, will lose in the course of time that vigour of health, and power of circulation, necessary to the perfect performance of all the animal functions, and this even without experiencing any distressing feeling of debility. Under these circumstances, it is not a matter of surprise that the disorder should be considered local, the change having been so gradual, as not to be perceptible to the patient: it is a minute inquiry only on the part of the physician, and that extending to the history of the former for months or years, which can lead to satisfactory results.

The practice I am now accustomed to adopt is as simple as the foregoing observations would lead the reader to expect. To restore the strength of the patient to its original standard, not simply before the cutaneous disease appeared, but even before those habits

or pursuits were adopted, which may have for years preceded it. If having been brought up to the age of puberty, or manhood, in the country, the patient experiences his first attack after confinement for a year or two to the laborious pursuits of trade, a case of which I have seen a great many instances; return to the country and relaxation from care, and labour is soon followed by the disappearance of the disease. If privation of rest, as in the case of studious persons, has contributed its effect as a cause, it need not be remarked, that books and late hours should be immediately avoided, and give place to healthy and amusing exercise by day, and lengthened repose by night. A liberal diet of animal food, and wine and porter in proper quantities, ought to be adopted, unless the state of the digestive organs should forbid it. In all cases, a change in the mode of living, and a temporary suspension of exertion, either mental or bodily, is of the utmost importance.

As regards local applications, and their effects, I am unable to offer any evidence of value, except as regards one individual preparation, which I have already alluded to elsewhere. In a former edition of this work, I took occasion to observe, on the disappointments we have been accustomed to expe-

rience in the local application of various powerful agents to different diseases of the skin, and it then appeared to me that such failures were mainly attributable to the neglect of appropriating in the different formulæ of lotions or ointments, the individual component parts to the manifest conditions of the cutaneous vessels. Thus, for instance, in the case of impetigo, where much irritation, itching, and a copious fluid secretion exists, sedatives of any kind produce only temporary effect. The disease, after appearing to subside, soon returns with even increased activity, the vessels of the part have become so debilitated by the excessive excitement of the disease, as to be incapable of performing their healthy functions. It would appear, therefore, a great desideratum, to combine in one local application what shall produce a sedative effect on the vessels of the inflamed part, and restore to them that tone which they have lost during the stage of excitement. It is on this principle, that the sulphur vapour bath has always appeared to me to act in various diseases of the skin; the warm vapour, by the copious perspiration it produces, unloading the cutaneous vessels, while the acid deposited upon them in this state acts as a direct astringent.

I know not whether the ointment prescribed under the head of lupus*, owes its good effects to the combined properties in question, or otherwise; but it does that in lepra, as well as many other cutaneous diseases less connected with the constitution, which no other application will do, viz. it quickly subdues the inflammation of the cutis, and produces a healthy cuticle. Its composition may not bear the test of chemical criticism, perhaps, but as remedies are estimated by their useful effects, this is of no importance.

Notwithstanding the value I have been compelled to attach to constitutional treatment, this ointment is by no means unnecessary. In all cases where it has been had recourse to, in conjunction with the tonic plan of treatment of lepra, the dark hue of the surrounding inflammation changes more rapidly to a brighter red, and the scales are more readily detached.

In the management of the scorbutic form, very little deviation from the above plan will be found necessary. The ointment should of course be omitted where actual ulceration has taken place, and the local treatment should be that of a common sore.

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* Vide p. 64.

CHAPTER VI.

OF PSORIASIS.

The meaning allotted to the term Psoriasis, as invented by Dr. Willan, is that of a disease as clearly dependent on disordered action of the vessels forming the cuticle, as that which has occupied the foregoing pages. "It may be briefly described as a rough and scaly state of the cuticle, sometimes continuous, sometimes in separate patches of various sizes, but of an irregular figure, and for the most part accompanied with rhagades or fissures of the skin." Most frequently it makes its first appearance in the spring or summer, when the determination to the skin is strongest, and when exposure to heat or exertion favours the latter. Some heat, itching, and irritation, is first perceived, a scale forms, which speedily separates, leaving a red inflamed skin. An-

other and another follow, each succeeding being thicker than the last, till some moisture, or even pustulation takes place; the scales at length crack and separate piece by piece, and the fissures in the different scales extend beneath the surface of the cutis. If the part affected be situated in the neighbourhood of joints, or otherwise influenced by flexion and extension, blood frequently issues from their bottoms, accompanied by much pain and smarting.

The term Psora, as adopted by the Greek physicians, was applied to the disease now termed Scabies; the characters of which it is scarcely necessary to say are totally unlike any dry scaly disease, in any of their stages; the term Psoriasis, therefore, as conveying an idea of analogy, is obviously improper.

From attentive observation of the varieties in figure, (for in point of fact, there are no other essential differences between this and the disease termed Lepra) I am fully convinced that all the purposes of useful discussion would have been effectually consulted in including them under one head with the latter. The information we have at present acquired in the modern study of cutaneous diseases does not enable us to find a better reason for their separation, than that afforded by the

circumstances of its having originated with the ancients.

Dr. Willan says, that "From the Lepra it may be distinguished not only by the different form and distribution of the patches, but also by its cessation and recurrence at certain seasons of the year, and by the disorder of the constitution with which it is usually attended." Spots of genuine Lepra, however, fully answering the description of this author, as regards their local characters, not only appear now and then by themselves, accompanied by symptoms of constitutional disorder, but very frequently mixed with the irregular patches of Psoriasis, without such attendant symptoms.

Medical men are often puzzled regarding the designation they shall give to an extensive scaly disease, because they are unable to determine to which of the two affections termed Lepra and Psoriasis it most nearly approximates. Its less tedious duration, and liability to recur, certainly constitutes a difference; but such difference depends simply on its extent, or the degree of irritability of skin of the patient. The latter circumstance also explains the superior degree of tenderness of the abraded cutis now and then manifest in Psoriasis; but with respect

to the rhagades or fissures spoken of as another point of difference, it is proper to observe, that they are sometimes seen in round leprous patches, situated in the neighbourhood of joints.

The irregularly formed patches of this disease are, according to Dr. Falconer, (and it is an observation confirmed by the evidence of others) frequently following checks to the perspiration, by copiously drinking cold water when heated by exercise: the eruption of Lepra often occurs under the same circumstances. A variety of other occurrences, supposed in different cases to have given rise to it, are detailed also in the list of supposed causes of Lepra.

Besides the local varieties of Psoriasis which Dr. Willan has spoken of, he has enumerated four of a general character, occurring on different parts of the body, appearing to be produced from constitutional causes only. These are the P. guttata, diffusa, gyrata, and inveterata *.

* For the convenience of the reader we transcribe the descriptions alluded to.

1. *Psoriasis guttata.* This complaint appears in small, distinct, but irregular patches of laminated scales, with little or no inflammation round them. The patches very

The first of these, at its commencement, is formed of distinct and *small* patches, with *ir-*

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seldom extend to the size of a sixpence. They have neither an elevated border, nor the oval or circular form by which all the varieties of lepra are distinguished; but their circumference is sometimes angular, and sometimes goes into small serpentine processes. The scale formed upon each of them is thin, and may be easily detached, leaving a red shining base. The patches are often distributed over the greatest part of the body, but more particularly on the back part of the neck, the breasts, arms, loins, thighs, and legs. They appear also upon the face, which rarely happens in lepra. In that situation they are red and more rough than the adjoining cuticle, but not covered with scales. The psoriasis guttata often appears on children in a sudden eruption, attended with a slight disorder of the constitution, and spreads over the body within two or three days. In adults it commences with a few scaly patches on the extremities, proceeds very gradually, and has a longer duration than in children. Its first occurrence is usually in the spring season, after violent pains in the head, stomach, and limbs. During the summer it disappears spontaneously, or may be soon removed by proper applications, but it is apt to return again early in the ensuing spring, and continues so to do for several successive years. When the scales have been removed, and the disease is about to go off, the small patches have a shining appearance, and they retain a dark red, intermixed with somewhat of a bluish colour, for many days, or even weeks, before the skin is restored to its usual state.

2. The *Psoriasis diffusa* spreads into large patches irregularly circumscribed, reddish, rough, and chappy, with scales interspersed. It commences, in general, with numerous minute asperities, or elevations of the cuticle, more

regular circumferences; they appear on almost every part of the body, and even on the face.

perceptible by the touch than by sight. Upon these, small distinct scales are soon after formed, adhering by a dark central point, while their edges may be seen white and detached. In the course of two or three weeks all the intervening cuticle becomes rough and chappy, appears red, and raised, and wrinkled, the lines of the skin sinking into deep furrows. The scales which form among them are often slight, and repeatedly exfoliate. Sometimes, without any previous eruption of papulæ, a large portion of the skin becomes dry, harsh, cracked, reddish, and scaly, as above described. In other cases, the disorder commences with separate patches of an uncertain form and size, some of them being small, like those in the psoriasis guttata, some much larger. The patches gradually expand till they become confluent, and nearly cover the part or limb affected. Both the psoriasis guttata and diffusa likewise occur as a sequel of the lichen simplex. This transition takes place more certainly after frequent returns of the lichen. The parts most affected by psoriasis diffusa are the cheeks, chin, upper eyelids, and corners of the eyes, the temples, the external ear, the neck, the fleshy parts of the lower extremities, and the fore-arm, from the elbow to the back of the hand, along the supinator muscle of the radius. The fingers are sometimes nearly surrounded with a loose scaly incrustation; the nails crack and exfoliate superficially. The scaly patches likewise appear, though less frequently, on the forehead and scalp, on the shoulders, back, and loins, on the abdomen, and instep. This disease occasionally extends to all the parts above-mentioned at the same time; but, in general, it affects them successively, leaving one place free, and appearing in others; sometimes again returning to its first

The second consists of *large* patches, also *irregularly* circumscribed. The third, as its

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situation. The psoriasis diffusa is attended with a sensation of heat, and with a very troublesome itching, especially at night. It exhibits small, slight, distinct scales, having less disposition than the lepra to form thick crusts. The chaps or fissures of the skin, which usually make a part of this complaint, are very sore and painful, but seldom discharge any fluid. When the scales are removed by frequent washing, or by the application of unguents, the surface, though raised and uneven, appears smooth and shining; and the deep furrows of the cuticle are lined by a slight scaliness. Should any portion of the diseased surface be forcibly excoriated, there issues out a thin lymph, mixed with some drops of blood, which slightly stains and stiffens the linen, but soon concretes into a thin dry scab; this is again succeeded by a white scaliness, gradually increasing, and spreading in various directions. As the complaint declines, the roughness, chaps, scales, &c. disappear, and a new cuticle is formed, at first red, dry, and shrivelled, but which, in two or three weeks, acquires the proper texture. The duration of the psoriasis diffusa is from one to four months. If, in some constitutions, it does not then disappear, but becomes, to a certain degree, permanent, there is, at least, an aggravation or extension of it, about the usual periods of its return. In other cases, the disease, at the vernal returns, differs much as to its extent, and also with respect to the violence of the preceding symptoms. The eruption is, indeed, often confined to a single scaly patch, red, itching, and chapped, of a moderate size, but irregularly circumscribed. This solitary patch is sometimes situated on the temple, or upper part of the cheek, frequently on the breast, the calf of the leg, about the wrist, or

name implies, is of a tortuous or serpentine character; and the fourth begins in separate

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within and a little below the elbow joint, but especially at the lower part of the thigh, behind. It continues in any of these situations several months, without much observable alteration. The complaint, denominated with us the bakers' itch, is an appearance of psoriasis diffusa on the back of the hand, commencing with one or two small, rough, scaly patches, and finally extending from the knuckles to the wrist. The rhagades, or chaps and fissures of the skin, are numerous about the knuckles and ball of the thumb, and where the back of the hand joins the wrist. They are often highly inflamed, and painful, but have no discharge of fluid from them. The back of the hand is a little raised or tumefied, and at an advanced period of the disorder, exhibits a reddish, glossy surface, without crusts or numerous scales. However, the deep furrows of the cuticle are, for the most part, whitened by a slight scaliness. This complaint is not general among bakers; that it is only aggravated by their business, and affects those who are otherwise disposed to it, may be collected from the following circumstances: 1. It disappears about midsummer, and returns in the cold weather at the beginning of the year; 2. Persons constantly engaged in the business, after having been once affected with the eruption, sometimes enjoy a respite from it for two or three years; 3. When the business is discontinued, the complaint does not immediately cease. The grocers' itch has some affinity with the bakers' itch, or tetter; but, being usually a pustular disease at its commencement, it properly belongs to another genus. Washerwomen, probably from the irritation of soap, are liable to be affected with a similar scaly disease on the hands and arms, sometimes on the face

irregular patches, which extend, and become confluent, until at length they cover the

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and neck, which, in particular constitutions, proves very troublesome, and of long duration.

3. The *Psoriasis gyrata* is distributed in narrow patches or stripes, variously figured; some of them are nearly longitudinal; some circular, or semicircular, with vermiform appendages; some are tortuous, or serpentine; others like earth-worms or leeches; the furrows of the cuticle being deeper than usual, make the resemblance more striking, by giving to them an annulated appearance. There is a separation of slight scales from the diseased surface, but no thick incrustations are formed. The uniform disposition of these patches is singular. I have seen a large circular one situated on each breast above the papillæ; and two or three others of a serpentine form, in analogous situations along the sides of the chest. The back is often variegated in like manner, with convoluted tetters, similarly arranged on each side of the spine. They likewise appear, in some cases, on the arms and thighs, intersecting each other in various directions. A slighter kind of this complaint affects delicate young women and children in small scaly circles or rings, little discoloured; they appear on the cheeks, neck, or upper part of the breast, and are mostly confounded with the herpetic, or pustular ring-worm. The psoriasis gyrata has its remissions and returns, like the psoriasis diffusa; it also exhibits, in some cases, patches of the latter disorder on the face, scalp, or extremities, while the trunk of the body is chequered with the singular figures above described.

4. The *Psoriasis inveterata* is characterised by an almost universal scaliness, with a harsh, dry, and thickened state of the skin. It commences from a few irregular, though di-

whole surface of the body, except a part of the face, or sometimes the palms of the hands and soles of the feet, with an universal scaliness, interspersed with deep furrows, and a harsh, stiff, and thickened state of the skin. The production of scales is so rapid, that large quantities are found every morning in the patient's bed. The nails become convex, thickened, and opake, and are frequently renewed; and at an advanced period, especially in old people, extensive excoriations sometimes occur, with a discharge of lymph, followed by a hard, dry cuticle, which separates in large pieces. "*In this extreme degree it approaches very closely to the inveterate degree of Lepra vulgaris in all respects, the* only *differ-*

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stinct patches on the extremities. Others appear afterwards on different parts, and, becoming confluent, spread at length over all the surface of the body, except a part of the face, or sometimes the palms of the hands and soles of the feet. The skin is red, deeply furrowed, or wrinkled, stiff and rigid, so as somewhat to impede the motion of the muscles and of the joints. So quick, likewise, is the production and separation of scales, that large quantities of them are found in the bed on which a person affected with the disease has slept. They fall off in the same proportion by day, and being confined within the linen, excite a troublesome and perpetual itching.

ence being in the form of the patches before they coalesce.*"

The constitutional treatment of these which has been found most successful, consists chiefly of the exhibition of those remedies with the mention of which the consideration of Lepra was concluded. The state of the constitution and chylopoietic viscera should always obtain the first attention; and if any feelings of irritation in the diseased parts should be experienced, saline aperients may be employed with advantage. The warm bath, as an application generally calculated to allay irritation, should be often had recourse to, in conjunction with gentle mercurial alteratives; and these together will be found adequate to the effecting the cure in the slighter cases; but if the disease assumes an obstinate form, the exhibition of the arsenical solution, or the use of the common or sulphur vapour bath may be individually or conjointly had recourse to, with a tolerable certainty that, by their judicious management, a healthy state of skin may be brought about.

The manner in which the return to a

* Bateman's Synopsis, p. 42.

healthy state of skin, both after Lepra and Psoriasis, is effected, is evidently by the diminution of the morbid excitement of the vessels of the part; the reddened margins of the diseased spots first losing their florid redness, and ultimately changing to a blue colour. When the scales fall off, a little scurf remains for a few days, and the natural colour of the part is resumed. This similarity forms another ground for the opinion of the analogy of the two diseases.

In the treatment of Lepra and Psoriasis, if no obvious benefit is derived by a patient exhibition of general alterative remedies, the frequent use of the warm bath, the common or sulphur vapour bath, the decoction of dulcamara, or such medicines as may be indicated by a chachectic state of constitution, the use of the liquor arsenicalis may be tried with the best hopes of success.

The *modus operandi* of this medicine is involved in much obscurity; there is, however, some reason to suppose that it is not unlike that attributed by Mr. Hunter to mercury, in the cure of Syphilis. It is certain, that in the diseases under consideration, if employed in small doses, and not followed up and gradually increased to a much larger extent than is commonly supposed prudent, it

loses much of the estimation which ought properly to belong to it. The extreme care and circumspection necessary in its exhibition is itself a restraining consideration in its employment; but if an inveterate disease can be cured by medicinal remedies, such care ought to be readily given.

I am in possession of some notes of a case answering to the description of Psoriasis inveterata, which have been handed to me by Mr. Gaskoin, of Clarges-street, whose various and well-executed drawings of cutaneous and other diseases have obtained for him no ordinary degree of credit. The case in question was treated by Mr. G. in the hospital of St. Louis in Paris. The arsenical solution was commenced in doses of two drops exhibited twice a day. The case was attentively watched, and the dose gradually increased, without any untoward symptom occurring, for the space of two months; at the end of which period, no less than thirty-eight drops were exhibited for each dose. At this time nausea and sickness being complained of, the medicine was suspended; a very important and rapid change in the state of the disease having occurred within the last few days. Three days after, the severe colicky pains commonly following

the exhibition of the medicine, even in much smaller doses, if less gradually administered, came on, followed by cold perspirations and great constitutional disorder. Opiates and cordials soon relieved these symptoms; and so satisfied was the patient of the good effects of the treatment, that, though a trifling degree only of the disease remained, he was anxious to return to the use of the medicine. The case was ultimately, though of years' standing, completely cured by adhering to the same plan.

Similar cases have occurred under my own observation, from an extensive use of this mineral, though more recently, in consequence of the comparatively trifling inconvenience of the sulphur vapour bath, I have had recourse to the latter at once, and thus saved the patient much pain and inconvenience.

Of the utility and effect of the sulphur vapour bath in Psoriasis, the following case is by no means an extraordinary instance.

"The subject was a gentleman about forty years of age, who from his boyhood has been afflicted with a most inveterate cutaneous disease, but from which he is sometimes quite free. His parents were not known to have had any skin disease, and he has no clue to

enable him to account for its origin. When this gentleman was first subjected to the employment of the bath, he was unable to walk; his legs, from the toes to the middle of the thighs, were incased in a thick scab, with long deep fissures, from which issued an abundant ichorous discharge. The thighs above this were studded with impetiginous pustules, the sacrum, gluteus muscles, and part of the lumbar region, were likewise covered with scab containing deep cracks. The arms and axilla on one side were covered with large patches of scab, all discharging the same kind of fluid. He was obliged to move with great caution, lest he should extend these cracks, or occasion fresh ones, which were always attended with much pain and inflammation. He had been in the habit of taking and persevering in the use of medicine, but was not aware that he derived much benefit from it.

He was directed to take three emollient vapour baths, and afterwards to persevere daily in the use of the sulphureous fumigating bath, and to take occasionally opening medicine. After the third fumigation, the amendment was evident, and he expressed himself much more comfortable in his feelings; he continued them for a fortnight with

regular progressive improvement. At the expiration of a month, the arms and axilla were well, and the scab on the legs was now only in patches, the left leg being much the best. There now came on a fresh accession of disease, showing itself in pustules with yellow heads a little above each inner ancle; higher up there were numerous small vesicles containing clear lymph; some other parts of the legs still, however, went on improving, and the fumigations were continued; this accession was not of long continuance, but scabbed over, healing underneath. He now complained of heat and itching in the face, particularly about the chin; he had slight feverish symptoms, for which he was directed a dose of the submur. hyd. and some saline medicine: he became relieved: achores made their appearance and gradually spread over the lower jaw, containing yellowish matter, forming scabs, with surrounding inflammation. To this part he pretty constantly applied flannels wrung out of hot water, and covered it with a bread and water poultice at night; there was no cracking of these parts, but much watery discharge.

He had used the fumigations daily six weeks, he now complained of stiffness, itching, and redness in the left groin; on examination, the

inguinal glands were enlarged, hard, and painful to the touch; as the swelling of the glands subsided, the redness increased, and he had intertrigo, which became very troublesome to him. A space the size of a large dollar next made its appearance on the right clavicle, near the humerus, of a bright threatening aspect, and a smaller spot of the same appearance showed itself on the left clavicle, both itching very much, and with moist exudation; these spots in forty-eight hours became joined by an inflamed line about an inch broad, hanging, as it were, like a necklace; round the larger spot there came many small-sized pustules with yellowish matter in them, these did not extend; the large spot gradually became whiter in the middle, extending to the edges, disappearing slowly, leaving a shining, smooth red surface, which, with the connecting line, gradually went away: of the intertrigo he was not quite well when business called him into the country. The legs, back, and arms were quite well: the gentleman used the bath seven weeks.

"I frequently observe pustules and vesicles at the same time in impetiginous patients. The affections of the face seemed to be the Porrigo favosa; the intertrigo again was of a distinct order; the affection of the chest

seemed to have been communicated from the chin, perhaps conveyed by frequent looking at the intertrigo of the groin, as was his custom when naked going into the bath, and, perhaps, when going to bed at night."

The predominance of the scaly state over that in which pustules existed in this case fully justifies its consideration as a case of Psoriasis, though at the period when the eruptions of pustules occurred, the parts where the latter were situated very closely resembled the more aggravated cases of Impetigo*.

The arsenical solution, and the sulphur vapour bath, promise, if used scientifically and carefully, to become instruments of pretty uniform power in the cure of the diseases under consideration. It seems not improbable that the due and efficient administration of the former has been often interrupted by the consequences of want of circumspection, and inattention to the gradual increase of the doses, and that the extent to which

* The gentleman to whom I am indebted for the notes of this case, is Mr. Green, of Marlborough-street. The profession and the public are much indebted to him, for his judicious application of these powerful agents in the cure of disease.

it has been hitherto administered may be very considerably increased with advantage.

The irritation of skin attending scaly diseases generally may be considerably diminished by frequent ablution with warm water; and, if the tenderness be not too great, gentle friction may be had recourse to. By such means, that accumulation of scales, which so encourages the lodgment of irritating secretions, will be prevented, and the latter removed almost as soon as formed. There are opinions on record, indeed, that these measures deserve the consideration of certain remedies in many cutaneous diseases.

In the 16th vol. of the Edinburgh Med. and Surgical Journal, Dr. Morrison, in a paper on this subject, describes a *modus operandi* of this kind which he has found extremely successful. "I dip," says he, "a sponge in lukewarm water, and after squeezing it hard, so that only dampness remains, I cover it with oatmeal; with this the parts are rubbed for some length of time, the sponge being frequently dipped in oatmeal, and this operation is repeated two or three times a day, according to the urgency of the itching, and other symptoms. After the parts have been sufficiently rubbed, they are washed, and gently

dried. Oil is then applied by means of a varnish brush, and the parts covered up with slips of linen."

A case of Psoriasis inveterata, of twenty months standing, is particularly mentioned as having been cured by this plan in the space of seven weeks. If bleeding should occur during the process, it is not permitted to interrupt the operation, and is rather productive of beneficial effects than the reverse. Should pustular formations occur, they are to be freely broken down, the secretion cleared away in the manner described, and their sites subjected to the friction in common with other parts. There is every reason to believe this practice capable of producing the best effects in such diseases, particularly in conjunction with the use of the sulphur vapour bath. Dr. M. seems to have been so convinced of its value, as to think its application justified in cases of small-pox, to the extent of breaking down every pustule as soon as formed; and, according to his opinion, it would be found capable of preventing the secondary fever*.

* However extravagant this proposition may appear at first sight, a due consideration of the question will perhaps lead to a different view, and give it rather the character of bold and energetic practice. It is very true, that the breaking down and rubbing away the contents of the fully matu-

Previous to dismissing the subject of Lepra and general Psoriasis, it may be as well to direct the reader's attention to some observations of importance recorded in the pages of periodical works, from which additional information of importance, or, at least suggestions worth attending to, may be extracted, under circumstances of difficulty, in treating these diseases or their sequelæ.

Mr. Cuming, in the twelfth volume of the Medical and Physical Journal, records a case in which considerable difficulty was experienced in removing the cracks or fissures of the disease in the hands, after it had been removed from other parts of the body. The use of blisters, under these circumstances,

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rated vesicle in a confluent state would be attended with much pain and irritation, and, perhaps, dangerous from the extent of surface thus abraded; but it is not so certain that positive mischief would arise, if such step was taken at an earlier period of the disease, and as soon as the vesicle was completed. Whoever has seen the contents of the fully maturated vesicle resting on the cutis for so many days, its contents partly absorbed, and partly undergoing the process of exsiccation on the skin; the powers of the constitution having been exhausted in its original production, and being now evidently sinking from the prejudicial influence of the demand upon it to repair the extensive mischief which the disease has produced, will think it a matter worthy of serious reflection. The practicability of the plan is another question.

produced the desired effect, and was followed by a healthy state of the skin.

On the subject of the internal use of arsenic, a communication by Dr. Girdlestone, of Yarmouth, in the 15th vol. of the same work, contains some observations which are highly valuable, as inculcating the necessity of a due degree of caution in the exhibition of this remedy. In one of the cases which he has detailed, three doses of eight drops each were followed in twenty-four hours by erysipelas, leading to the temporary suspension of the remedy, which was subsequently renewed, and produced a speedy recovery. Another case, detailed in the same place, was cured by the same means, but was attended previous to its final disappearance by boils on the affected parts. Dr. G. further observes, that when the disease was removed by this medicine, a commonly previous effect of it was a temporary aggravation of the irritation which characterised it, with the appearance of boils or fissures.

In the 17th vol. another case is recorded, in which it appears Dr. Batty was induced to try the arsenic from Dr. Girdlestone's recommendation of it. In this case almost every species of local application had been tried without success. Ointments of calomel, of

white and red precipitate, ung. hydr. nitrat., a solution of lunar caustic, ointments of tar and sulphur, and a variety of internal medicines, had all been subjected to a fair trial without important benefit before this medicine was had recourse to: the effect, however, was a speedy recovery.

The use of kali sulph. is, I think, in the same vol., stated by Mr. Earnest to have been equal to the cure of a case of Lepra. It was exhibited twice a day in doses of two scruples, a solution of it being at the same time employed as a lotion. I have given this medicine a fair trial since, without any apparent good effect.

The local situations of the more limited forms of Psoriasis, as in the consideration of Herpes, have formed the foundation of separate designations in the arrangement of Dr. Willan. The P. labialis, P. palmaria, P. ophthalmia, P. preputii, &c. are instances of this. The remarks, however, which I have thought proper to make on this multiplication of terms in Herpes, and elsewhere, apply with equal propriety here, particularly as the same plan of treatment in such local varieties is found equally successful in all; the only local application generally necessary, after the exciting cause is removed, being that of a little of the

ointment of nitrate of mercury in a diluted state.

This latter observation particularly applies to the disease as occurring about the eyes, on the scrotum, on the arms of washerwomen, and the backs of the hand. On the prepuce and palms of the hands greater difficulties are experienced, because the motion of the part is frequently tearing the bottom of the cracks open, and causing blood to flow from them, and producing great inflammation and increase of heat and dryness; the same mischiefs occur in fissures of the lips, as most persons at some period or other have opportunities of experiencing.

The disease, as it has been found occurring on the back of the hand, a form stated to be peculiar to bakers, that also spoken of as peculiar to washerwomen, have their origin, generally, in entirely local causes. Inattention to cleanliness, and the constant application of dry, heated, powdery substances, are uniformly found to have acted as causes in the first; while actual solution of the cuticle, and partial abrasion of the tender surface of the cutis, constitute the mischief which characterises the latter. It is well known that strong solutions of potash speedily act on the cuticle

in any part of the body, and that in the labours of this class of persons, this alkali is used in great abundance. Its operation is also farther increased by the addition of friction. The part which has been chosen for representation in Dr. Bateman's plate is about the middle of the fore-arm, to which part they are accustomed to immerse the arms, and where it is obvious the fluid lodges, dries, and becomes more concentrated. Sedative applications are most successful in these cases: the warm bath and diluted liq. plumb. acet. alternately for the first few days, and afterwards the application of the nitrated mercurial ointment before mentioned, form the best plan of treatment; but should any degree of obstinacy be manifested, the application of sulphur vapour will soon remove the difficulty*.

The P. palmaria is sometimes difficult to remove; it is also the most common of the limited forms of the disease. As its designation implies, it chiefly originates in the palms

* In these local affections, it is desirable to have the vapour only applied locally. Mr. Green has so modified the apparatus of one of his baths, as to admit of this without the unnecessary trouble attendant on completely undressing, &c.

of the hands, and does not disclose in its history and progress any important connexion with the constitution. It is, nevertheless, frequently obstinate and tedious, because, as already stated, the parts affected are incessantly in motion.

It usually makes its appearance with some irritation and itching along the course of the lines of the palm; a little scab is formed, which is rubbed off, and a slight discharge takes place. The new skin which is formed is delicate, and around its margin, the original cutis, much thickened, appears to detach itself. Its harsh and unyielding edge seems to give it the power of irritating the central points where the new skin begins to form, and this process is interrupted; minute scales, instead of healthy cuticle, are formed, which, from time to time, become detached. The constant opening and shutting of the hand increases the mischief, and fissures, more or less extensive, which frequently bleed, and become excessively tender and painful, follow. The original hard and dry skin of the part separates in a circular form, around the originally diseased spot, and the course of another of the palmar lines or flexures, coming within the reach of the mischief, begins to assume the same features as that first affected. Even-

tually the course of the greater portion of these flexures are occupied by fissures, more or less deep, and the hand cannot be extended without the greatest difficulty and pain.

In the treatment of this affection it will be obvious, that the chance of doing good will depend very much on our ability to keep the part in a quiescent state. It is impossible, without complete restraint, to calculate with certainty on the influence of any application, whether in the form of lotion or ointment; but when this is attained, there are several which appear to be capable of expediting the cure. Among these the ung. hydr. nitr., diluted with an equal part of hogs' lard, is frequently useful. Common saturnine lotions also are sometimes sufficient. Indeed, it would appear that, in the majority of cases, a healthy state of parts is only prevented by the irritation consequent on motion.

When such measures fail, there still remains in the hands of the practitioner a weapon, which may be had recourse to with confidence and safety, though apparently severe in its direct effects. It consists in the application of the undiluted nitric acid to the diseased surface, and more particularly along the course of the fissures. The inflammation it excites renders a quiescent state of the

parts a matter of compulsion on the part of the patient, and by the time it subsides, the site of the disease will have changed its appearance. A thickened scale or scab separates, and leaves a healthy-looking, though delicate cuticle covering the part, which gradually becomes hard and strong.

Due regard should of course always be had to the state of stomach and bowels, for even in the most trifling cutaneous affections, disorder of these organs materially impedes recovery. As regards the Psoriasis of the lips and prepuce, some such disorder will be generally found to an extent capable of acting as a direct cause in the production of the disease, and therefore requiring the first attention.

On the subject of the disease situated on the latter of these parts, it may be necessary to notice, as we have done in a former instance, the description given by Mr. Evans. "This disease," says he, "appears in the form of deep cracks or chasms around the margin of the prepuce, which are extremely irritable, and apt to bleed whenever any attempt is made at retraction, and which are generally, from the loose cellular structure of the part, much deeper than when the disease occurs on

the lips. The discharge is of a glutinous nature till the morbid action ceases, when it becomes purulent, and then the healing process begins, which is often very tedious.

"In the treatment of this complaint, I have found the ung. hydr. nitrat. diluted to half its strength the best application."

The same application may be considered entitled to equal consideration, in the case of fissures of the lips.

PSORIASIS INFANTILIS.

The Psoriasis of infants is entitled to a separate consideration from the foregoing, on a very important account. There is no question, that it has often been mistaken for the consequence of venereal taint on the part of the parents of the child who is the subject of it, and has been, therefore, the means of inflicting much injury and undeserved distress. Dr. Willan, after alluding to one or two unimportant points, in which he states the vevereal affection of the skin of infants to differ from that under consideration, advises "practitioners not to be too hasty in judging from mere inspection, and never to decide till they

are *justified by collateral* circumstances." It is seen in infants from birth up to three years of age.

From a very minute and lengthened inquiry into the history of many cases of this disease, I am irresistibly led to the conclusion, that it has no connexion with any form of venereal disease, except indirectly, *i. e.* when syphilitic affection may have combined with other causes in reducing the strength of the mother, or otherwise depriving the child of healthy sustenance. A generally healthy performance of the different animal functions, which is often found compatible with constitutional syphilitic disease, is not seen in the cases of infants affected with Psoriasis. It is found to occur, moreover, where the parents on neither side can be liable to suspicion.

Like the Psoriasis and Lepra of adults, it may continue long after its direct exciting cause has ceased to exist; and when taking place on the skin of unhealthy and poorly nourished children, it frequently continues when a better constitutional condition has been produced. From this circumstance, and the unyielding nature of the disease, it has no doubt sometimes happened that the suspicion alluded to has arisen, where, at the commencement of the eruption, it would not

have been entertained; and the treatment which has been adopted under these circumstances has been improper and injurious. In an institution to which I have the honour of belonging, cases without number have come under my notice, where poverty of circumstances existed on the part of the parents in a most extreme degree, evidently operating as the cause of the disease, when from a change to better living, consequent on the parents obtaining employment, the disease has speedily disappeared. Many such cases have been considered and treated as venereal without benefit; but, on the contrary, with aggravation of all the symptoms.

With respect to the class of society among which infants are chiefly affected with this disease, it may be safely asserted, that it is almost unknown among the rich or affluent, or even those whose circumstances bear them uniformly above the reach of want. It may sometimes occur from bad feeding or neglect, but it is generally the concomitant of poverty, and for the most part only seen in the cellars and confined apartments of the poor and unhappy, where privation of nourishing food and impurity of atmosphere unite their depressing powers.

When the disease first comes under our

notice among the poor, it is characterised by red patches of inflammation on the cheeks, chin, forehead, nates, abdomen, &c. On the face some of the patches are small and irregular, others large, and assuming somewhat of a circular form. Some are covered with a horny scale, which is glossy and smooth to the touch, but which in a few days cracks and exhibits fissures of greater or less length and depth. Some are occupied by portions of scales of morbid cuticle rapidly detaching themselves, while others are forming beneath, which take the same course. The eyes sometimes partake of the inflammation, and generally the mucous membrane of the nose becomes inflamed and thickened, leading to snuffling, difficulty of respiration, and some fluid discharge.

In the more aggravated cases, the bottoms of the fissures emit a bloody discharge, if situated in the neighbourhood of joints, but not otherwise; and if no great emaciation may have existed at first, the irritation and pain belonging to the disease makes it soon apparent, and it generally increases with rapidity till death takes place.

The most irritable and painful spot which the disease is found to occupy is about the nates or between the legs; the perineum,

labiæ, scrotum, &c., also, are not unfrequently the seats of much abrasion and tenderness, apparently produced by the stimulating properties of the urine.

It seldom happens that if the excretions be examined, a very disordered state of the alimentary canal, with the secretions of the liver be not discovered, which may have been either concerned as an original cause or impeding the restoration of health and strength. Hence small doses of the hydr. e Creta, with the occasional use of a brisker purgative, are necessary. Tepid bathing, to the extent of liberating all the hard scales which may have been formed, and allaying the general irritation of the skin; frequent ablutions with warm water of the more irritable parts, change to a purer atmosphere, and more efficient nourishment, have been in most cases adequate to the cure, when assisted by internal remedies of this nature.

In closing the subject of Psoriasis, it may not be amiss to direct the reader's attention to the following note *, on a similar disease,

* The pellagra, as an endemic disease, prevails chiefly in the plains of Lombardy, which are fertile even to luxuriance. The principal objects of cultivation, besides the produce of vineyards extensively spread over their surface, are maize, rice, and millet. In some districts, and particularly between

which is spoken of by authors as the pest of many parts of Italy, under the name of Pel-

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the rivers Adda and Ticino, the pastures are extensive, and yield a considerable produce of milk, from which the Parmesan cheeses are made. Latterly the disease has been confined to no particular situation, varying in the degree of fertility of soil, or purity of atmosphere, but has been recognised as increasing in every part of Lombardy, as well on the plains as among the hills which rise on their northern border towards the Alps. It is also seen in the province of Friuli, the district which intervenes between the foot of the Carinthian Alps and the northern shore of the Adriatic, and in the districts of Milan and Padua, where it is peculiarly prevalent, it is computed to attack five inhabitants out of every hundred.

The pellagra is confined almost exclusively to the lower classes of people, and chiefly to the peasants and those occupied in the labours of agriculture. It appears first in a local cutaneous form, sometimes preceded by languor and indications of a general cachectic state of body. The local symptoms very generally show themselves in the first instance *early in the spring at the period when the mid-day heat is rapidly increasing, and when the peasants are most actively engaged in the labours of the field.* The patient perceives on the back of his hands, on the feet, and sometimes, but more rarely, on other *parts of the body exposed to the sun,* certain red spots or blotches, which gradually extend themselves with a slight elevation of the cuticle, and a shining surface, not unlike that of Lepra in its early stage. The colour of this eruption is somewhat more obscure and dusky red than that of erysipelas; it is attended with no other sensation than that of slight pricking or itching, and some tension in the part. After a short continuation in this state, small tubercles are frequently observed to

lagra *. It will probably be thought not assuming too much, to say that the Pellagra

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arise on the inflamed surface, the skin almost always becomes dry and scaly, forming rough patches, which are excoriated, and divided by furrows and rhagades. Desquamation gradually takes place, which, though it leaves behind it a shining unhealthy surface in the parts affected, yet, in the first year of the disease, is rarely followed by a repetition of the appearances just described. Towards the close of the summer, or occasionally still earlier, the skin has resumed nearly its natural appearance; and but that the farther progress of the disease is familiar to every inhabitant of the country, the patient might be led to flatter himself that the evil was gone by, and that there was no particular reason to dread its recurrence. According to Jansen, except the mere local affection, the health is not in the least impaired, the patient enjoys a good appetite, eats heartily, and digests well; all the excretions are healthy, and in females the menses are regular; while others assert, that even in the first period of the disease, certain general symptoms occur, which are important, inasmuch as they indicate the constitutional nature of the malady. Debility of the whole body; vague and irregular pains of the trunk and limbs, but especially following the track of the spine and dorsal muscles; headache, with occasional vertigo; irregular appetite, and general depression of spirits: these are the more ordinary symptoms which attend the early part of its progress. The bowels are, for the most part, relaxed, and usually continue so in the further course of the disease. There are no febrile symptoms; and in females the menstruation is generally continued without irregularity.

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* See Jansen's Treatise on Pellagra. Holland, Med. Chir. Transactions. Alibert, Icthyosis Pellagrè, &c. &c.

is nothing more than Psoriasis, aggravated in an intense degree by the peculiar force in

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"The remission which the patient obtains during the autumn and winter of the first year is almost universally followed by a recurrence of his symptoms in the ensuing spring, under a more severe form, and with much greater disorder of the constitution. The cutaneous disorder is renewed, and spreads itself more extensively; though still affecting chiefly the hands, neck, feet, and other exposed parts of the body. The skin becomes callous and deeply furrowed; and large rhagades show themselves, especially among the articulations of the fingers. From the cases I have seen of the cutaneous affection in this stage, I should speak of it as most resembling the inveterate degree of Psoriasis, or of the Lepra vulgaris, with some affinity certainly to the Ichthyosis, under which, as I have already mentioned, Alibert has classed it. The debility is greatly increased in the second year of the complaint, frequently depriving the patient of all power of pursuing his active labours, and rendering him peculiarly susceptible of all changes of temperature. Partial sweats frequently break out without any obvious cause. All the nervous symptoms of the first year are renewed in more severe degree; there is a general tendency to cramp and spasmodic affections; the mind begins to suffer under the disorder, and the feeling of anxiety and despondence is very strongly marked. The symptoms already noticed make progress as the heat of summer advances; and with greatest rapidity in those patients who are much exposed to the sun. As in the preceding year, they begin to decline towards the middle or end of autumn; but the remission, as well of the local affection as of the general disorder, is much less complete than before, and the patient

these parts of the world of its common and general causes.

continues to suffer during the winter from the debility, and other effects consequent upon the disease.

"In the third year every symptom is renewed at an earlier period, and in an aggravated degree. The constitutional malady shows itself under a variety of forms; some of the symptoms having considerable analogy to those of scorbutus, all of them indicating a general cachexy of habit, and more particularly a lesion of all the voluntary functions. The debility now becomes extreme; the patient is scarcely able to support himself, and the limbs, besides their feebleness, are affected with pains, which still further impede the power of motion. The diarrhœa continues, and tends of course to augment this debility. Frequently a dysenteric state of the bowels comes on in the latter stages of the disease. The breath is generally fetid; and the odour of the matter perspired often extremely offensive. The appetite and digestion are irregular, yet, on the whole, perhaps, less affected than most of the other functions. Dropsical effusions now frequently come on: occasionally ascites, but more commonly anasarca. Vertigo, tinnitus aurium, and double vision, are almost universally concomitants of this stage of the disorder, and all the senses become exceedingly impaired. Some spasmodic affections are general, and these not unfrequently take a very decided epileptic form.

"Connected with these latter symptoms is the effect which the pellagra produces upon the minds of those suffering under the malady, which effect forms one of the most striking circumstances in the history of the disease. The anxiety, watchfulness, and moral depression of the patient are rapidly augmented. In the hospitals appropriated to

the reception of such cases, the pellagrosi afford a melancholy spectacle of physical and moral suffering, such as I have rarely had occasion to witness elsewhere. These unhappy objects seem under the influence of an invincible despondency; they seek to be alone, scarcely answer the questions put to them, and often shed tears without any obvious cause. Their faculties and senses become alike impaired, and the progress of the disease, where it does not carry them off from debility and exhaustion of the vital powers, generally leaves them incurable idiots, or produces occasionally maniacal affections, which terminate eventually in the same state. As a striking proof of this tendency of the disease, I may mention the fact, that at the time I visited the lunatic hospital at Milan, there were very nearly 500 patients of both sexes confined there, of which number more than one-third were pellagrosi; people brought thither by the termination of their disorder, either in idiotcy or mania. Even this statement gives little adequate idea of the ravages of the disease in this mode of its termination. The public hospitals of the country are wholly incompetent to receive the vast number of persons affected with the pellagra; and the greater proportion of these unfortunate people perish in their own habitations, or linger there a wretched spectacle of fatuity and decay. Where debility, as generally happens, is the cause of death, it manifests itself in the latter stage, with the usual concomitants of colliquative diarrhœa, spasmodic affections, and coma; and produces a degree of emaciation, scarcely to be surpassed in any other disease."

The mania consequent on pellagra is often of a violent kind: when it makes its appearance, the disease is in some degree retarded, and the strength less rapidly declines. Though the period which the disease lasts has, for the convenience of description, been spoken of as three years in the preceding account, it is generally of much longer duration, being renewed every spring, and disappearing again in the autumn. Change of situation and mode of life is found

useful; but the class of society to which the patients belong renders this step generally impracticable. If no remedial measures are adopted before the third or fourth year of the disease, little benefit arises afterwards from the adoption of any plan of treatment.

Dissection discovers no organic affection of uniform occurrence, though visceral disease is not uncommon. Dr. Holland, however, considers these affections, when discovered, as more probably the consequence than the cause of the pellagra. Hereditary origin has been generally traced by different authorities in a satisfactory manner, both sexes being equally liable to it.

The disease has gradually become more and more prevalent within the last fifty years; from which consideration chiefly, Dr. Holland supposes that "it depends on some present peculiarities in the mode of life of the peasants of this country;" an idea which historical facts completely support, as it is evident that a multitude of powerful and concurring circumstances have, during the period specified, continued to operate in breaking down the spirit, and impoverishing the resources of this unfortunate class of people. The wars which have so often devastated the country, frequent changes of political state, variable systems of government, heavy taxes and imposts, and last of all, a general heart-breaking conviction that patient submission to such grievances, or the most industrious efforts to bear up against them, were alike unrewarded by an ultimately beneficial change, are circumstances calculated to break down the proudest spirits, and poison at their very sources those incentives to contented and industrious exertion on which the health and comfort of the peasantry of all countries is well known chiefly to depend. To these causes may be added a decaying state of commerce, and a faulty system of arrangement between the landlords and the cultivators of the soil, all tending to depress agriculture, and to reduce the peasantry at large to much misery and privation.

There can be no question, that the observations of Dr. Holland, above alluded to, are, to their full extent, correct, as regards the causes producing this disease: thus the terrific and heart-rending picture is presented to us of an extensive population, inhabiting a country rich in the gifts of a beneficent Providence, endowed in an extraordinary degree with all those properties of the soil which are necessary to the utmost luxuriance in the production of the requisites of life, given up to the ravages of a demoralising and disgusting disease, from the simple influence of bad government, and the desolating effects of war.

Pellagra may, perhaps, be correctly defined a species of Psoriasis, aggravated by inattention to cleanliness, low living, and extreme poverty; the local cutaneous affection obtaining its only variations in character from this disease, from the irritation attending continued exposure to the heat of the sun.

CHAPTER VII.

PITYRIASIS.

SCURFY exfoliations of the cuticle in different parts of the body, usually unaccompanied by much irritation or fluid secretion, constitute the above form of cutaneous disease.

It has occupied a great portion of the attention of Alibert, and in its different situations and variations in appearance, obtains a large space in the pages of his account of "Les Dartres."

The most common situation of scurfy accumulation is the scalp; and occurring in infants more frequently than at any after period of life, it has obtained the name of dandriff, from nurses and others, under whose notice at this age it most frequently comes.

Though very common in infants, however, it is now and then extremely troublesome in

persons of maturer age. Adult individuals of dark complexions, and those of native Indian extraction, are particularly liable to it; and in such cases it is not unfrequently obstinate and intractable.

The P. capitis (as it has been designated by Willan and Bateman), or the dandriff of infants, is usually not of a very important nature. If the child who is the subject of it be not very much neglected in point of cleanliness, it usually disappears in a few weeks; but now and then, under different circumstances, it is followed by considerable irritation, fluid secretion, and scabbing, or a state much resembling the Porrigo furfurans. Under circumstances of peculiar aggravation, indeed, there is no real difference between the two affections.

With respect to the causes of this form of disease, it seems clear that it is partly, if not wholly, dependant on the disposition to determination to the head, so generally seen in infants; and it is by no means improbable, that in those cases where much irritation and fluid secretion takes place, the vessels of the brain are relieved by it. The state of the child's habit and general health, therefore, requires serious consideration in its treatment: sedative applications

are rarely advisable, or even safe; nor does the affection require indeed any notice beyond what is comprehended in attention to the general health, and keeping the scalp as free from accumulation as can be done with convenience, and without pain.

In the adult subject, Pityriasis now and then is seen, wearing a character materially conducing to the discomfort of the individual. Different parts of the body become the seats of much itching and tenderness, and when friction is employed, scabs of considerable thickness drop off, some soft and moist, others dry and thin; the whole of the parts from which they have been separated, exhibiting a red, shining, glossy, and sometimes slightly moist surface. The skin of the chest and back are the common seats of this form of the affection. The hairy scalp and its margin also partake of it, and the exfoliations from the latter surface exhibit an increased thickness and moisture; the result of the increased irritation produced by the hair. The colour of the affected parts when covered by the diseased cuticle is of a lightish yellow or copper hue; when these have been washed or rubbed off, it approaches more to red; but the cutis at no time appears of the colour consequent on common abrasion. This is a

marked peculiarity of the affection, and clearly proves the fact elsewhere insisted on, that one set of vessels forming part of the dermoid system may be affected by disordered or inflammatory action without the participation of others. Those vessels only, whose office it is to secrete the cuticle, are affected in this disease; and hence, the lightness of colour alluded to, and the immense production of scurfy exfoliation, or imperfect cuticle.

The figure of the affected patches is exceedingly irregular: here and there are spots of from half an inch or less, to two or three inches in diameter, more or less approaching to a circular form. These will perhaps be found around the margin of a larger patch, the outlines of which are as irregular as the outlines of a map of an island. The colour of these larger patches also varies from time to time in different parts, from a light straw to a reddish colour; hence the term P. versicolor, P. rubra, &c.

Another form of cuticular exfoliation which I have seen in individuals who have been resident in warm climates has not, I believe, been described elsewhere. The chest and back are its usual seats. There is at times considerable itching attending it. When the body is exposed, the outlines of the affected

parts are easily traced by the eye, and are of a darker brown hue than the adjacent skin. If the finger be drawn over them, no inequality or elevation is perceptible; in fact there is nothing but the colour which enables us to trace its boundaries. If a dry cloth be rubbed forcibly on it, large films of thin delicate cuticle are rubbed off; and where these thin pellicles are once broken, they may be gently raised and detached throughout the whole diseased surface. Where such detachment has been affected, the cutis is tender, and on being touched or rubbed, it smarts, and becomes more inflamed. Nothing like dry or moist scurf is found separating itself from the cutis in this form in any of its stages.

Another form has been found occurring, where hereditary dryness of skin, and a disposition to crack and form fissures, has been known to exist. In such cases the individuals have been able to detach many square inches at a time, without pain or difficulty, a sound cuticle of ordinary strength and thickness still remaining to defend the cutis. The exfoliated portions of cuticle exhibit the cutaneous lines and perforations very beautifully, and are nearly transparent.

On the subject of the pathology of this

affection, and more particularly the form first mentioned, as occurring in the adult, we may remark that its pretty uniform occurrence in individuals of delicate health, and diminished energy of circulation, will lead us to some correct conclusions. In such states of system the cutaneous vessels partake of the general debility, and have the disadvantages of their locality as furthest from the centre of circulation, and being exposed at the same time to vicissitudes of temperature superadded to these. They are incapable under these circumstances of performing that part of their offices on which the formation of sound cuticle depends, and they produce instead the delicate and ill-formed substance described.

The state of the circulation and system in all cases which come under our notice proves this view of the case to be correct. I have never seen a single case where want of energy was not apparent, and very few where the supply of this was not followed by speedy recovery.

Violent and distressing impressions on the mind, original debility of constitution, the depressing effects of long-continued illness in warm climates, &c. are found very commonly to have been co-existent with the first appearance of the disease.

The constitutional treatment which will be found most successful is that which is in strict accordance with the above principles. Measures which tend to invigorate the system will be always proper if not forbidden by organic disease. Bark, steel, sea bathing, gentle exercise in the open air, ease of mind, nourishing food, and plenty of rest, constitute what is usually requisite on such occasions. Now and then the sulphur vapour-bath has been rendered necessary, the cutaneous vessels having failed to recover their tone, though the general health had been much improved.

When the scalp is much affected, and the scurf forms in considerable quantities, the free use of a solution of acetate of zinc, in equal parts of rose water and proof spirits, constitutes an agreeable and useful application. The scalp may be freely bathed with it twice a day with considerable relief.

SECTION III.

On diseases exerting a probably salutary influence on the system originally produced by, and usually symptomatic of, deranged digestive organs, and characterised by active inflammation.

CHAPTER VIII.

PORRIGO FAVOSA.

The diseases known by the names of Porrigo favosa, and P. larvalis, stand first among these, and the consideration of the pimples of strophulus, lichen, &c. and urticaria, may with propriety follow. The vesicular herpetic affections, and the carbuncular boil of the cutis, comprehend the remainder of this division.

The liberty which I have taken in the separation of the favous Porrigo from the other diseases bearing that name may appear to require some explanation. From the views taken in the preceding pages of the pathology

of the more obstinate forms of what has been denominated Porrigo, it will be observed, that I have particularly noticed the generally local characters of the complaint, and the dependence it frequently has for its support on the operation of locally irritating causes.

The causes and pathological history of Porrigo favosa are obviously of a different character: the latter has always a constitutional origin, and always requires the exhibition of remedies through the medium of the constitution.

The description of this affection given by a preceding author is as follows* :—

"On the scalp the pustules are large, soft, whitish, itching, and slightly inflamed at the base. At first they are distinct, and partially distributed, as on the side of the head, or about the occiput. When broken, they discharge a thick viscid matter, which gradually concretes into irregular brown or yellowish semitransparent scabs. The ulcerations gradually extend, with a constant and copious discharge, by which the scabs are kept moist, and the hairs are matted together. Under

* It will be observed, that there are many points in this description that will not apply to *all* cases, or in fact to any occurring in decent society.

these circumstances, Pediculi, which are bred in great numbers, produce an incessant irritation, and contribute to aggravate the disease, and to excite fresh pustules. The eruption finally covers the whole scalp, the pustules in some places remaining distinct, in others becoming confluent, so as to form irregular ulcerated blotches. From these, when the coverings or dressings of the head are removed, a sour rancid vapour is exhaled, which affects very disagreeably both the eyes and the organs of smell and taste in persons who examine or dress the patient.

"In many cases there are among the pustules small red smooth tumors, which desquamate at the top, and very gradually proceed to suppuration, in the same manner as scrophulous tubercles do on the arms, &c. Sometimes, large abscesses form near the vertex, or at the occiput, probably originating in lymphatic glands situated there. As soon as they are broken, and begin to discharge freely, the pustular eruption and small ulcers on the other parts of the scalp disappear.

"During the course of the Porrigo favosa affecting the scalp, the glands on the sides of the neck, and sometimes the parotids, harden and enlarge very gradually. They are at first like a series or chain of small hard knots,

without discoloration of the skin, but some of them afterwards inflame and suppurate.

"The Porrigo favosa affecting the face sometimes commences about the lips or upon the chin; but at other times extends thither from the scalp or from behind the ears. The pustules, in general, appear first at the corner of the mouth, without much tension, or inflammation of the skin. They are set near together, in an irregular cluster, and contain a straw-coloured fluid; when broken, they become confluent, and discharge a clear, viscid matter, which afterwards concretes into a yellowish scab. Other similar ulcerations appear, soon afterwards, at the opposite corner of the mouth, on the lips, or about the chin. These blotches being attended with an incessant itching, children cannot be prevented from rubbing or picking them; the consequence of which is, that their borders are kept sore, inflamed, and continually extending. The complaint has a most unpleasant aspect, when the ulcerations entirely surround the mouth, and are covered with large, elevated, irregular masses of scab, like honeycombs. There seems to be a considerable degree of acrimony in the matter discharged from beneath the scabs; for the part of the breast, which comes frequently in contact

with the diseased chin, soon turns red, and exhibits an eruption of pustules, which terminate, as on the face, by a superficial ulceration. A similar appearance is produced on the arms of the nurse, who attends a child affected with the complaint."

In removing the scabs of this disease, whether existing on the head, or other part, we discover a reddened and inflamed surface, pouring out, with excessive rapidity, a viscous transparent fluid, which speedily dries and forms fresh scabs of various shades of colour, from a transparent yellow, to a dark brown. An areola of inflammatory redness usually surrounds the part, as if the whole energies of the vessels of the diseased spot, and adjacent cutis, were called forth in keeping up the fluid secretion.

This state of matters will be constantly found, whenever the scabs are removed; in doing which, a small quantity of blood sometimes flows from the surface. The fluid secretion, however, at no time, (except where constant irritation is kept up by picking the scabs, which children are accustomed to,) appears like pus; for it is not opake, nor does its chemical analysis afford similar results. The surface is not ulcerated, but merely abraded; the fluid, as I have before observed,

being poured out from the open mouths of its vessels.

In the management of this disease there are few points of importance, beyond those which are comprehended in attention to the general health. The state of system under which it usually occurs, as a spontaneous disease, will be found more frequently to indicate the necessity for depletion and alteratives, rather than tonics, which have been recommended; but many cases do undoubtedly occur, where the latter are imperiously called for.

A diligent inquiry into the history of the individual case will often enable us to discover, that the eruption first appeared in a state of constitution opposed to that existing when it first comes under our notice, thus the patient may be emaciated and weakly when proper medical advice is applied for, and the cutaneous affection wearing the most unpromising character; a condition which is often brought about by the low living, and the excessive use of purgatives, very commonly resorted to on its first appearance, and one in which tonics and better living will be of primary importance. I have lately seen a number of cases of this kind in a family of distinction, the children of which had been

long suffering from the disease, which manifested no disposition to improve, till a decided tonic plan was had recourse to. If it be seen at its commencement, the mischiefs of such a plan of treatment will be avoided, and it will be found readily to yield to mild aperients and alteratives.

Applications which allay irritation and diminish pain are useful auxiliaries; and these together will be found adequate to the necessities of most cases, not occurring on the scalp.

On this latter part, however, obstacles intervene, requiring some alteration of treatment. Here the disease may be considered, as constantly under the influence of irritation from the hair, while the glutinous secretion lodging, and being retained upon it, prevents any application to the affected surface, and becomes a source of mechanical irritation, sufficiently powerful to counteract the effect which internal remedies may be supposed to have in subduing it.

In protracted cases, such as those detailed by Alibert and others, where the mischief and torment of the disease are aggravated by myriads of vermin, and the accumulation of weeks and months of the secretions of the part; where neglect and filth have contri-

buted from the beginning all their influence to support the disease; the most material portion of our attention must be directed solely to the part. To remove such collections of filth, at the risk of some pain to the patient; the scabs in the first place, by continued soaking in warm water, with a plentiful use of soap, and the hair afterwards by the razor, are steps of absolute necessity, without which, our time and subsequent exertions may be fruitless.

In such cases, too, a considerable extent of ulceration is sometimes discovered, though not often sufficiently deep to affect the roots of the hair. But whether ulceration exists or not, the use of fomentations and poultices are necessary to subdue the inflammatory action of the vessels of the part; and when this has been effected, a little attention to the general health is often all that is necessary to the cure.

The length of time during which local applications may be requisite, however, depends very much on the period which the disease may have existed; for the action of the part acquires increased vigour with every week of its duration, and must frequently continue on the scalp a considerable length of time, after the causes originally producing it have ceased

to exist: and even when much care is taken to remove the secretion as soon as formed, and allay irritation by soothing remedies, the effusion of viscous fluid on the part is now and then still kept up, apparently dependent on a morbidly relaxed state of its vessels.

An effectual application will be found in a solution of caustic*, or sulphate of copper, in such a case: these fluids are to be applied with a camel's hair pencil, to the abraded surface two or three times a day, until the discharge ceases: they appear to act by constringing the relaxed vessels on the surface from which the discharge oozes. In some old standing cases, their strength may be sometimes considerably increased with advantage, or either of the preparations may be lightly rubbed over the surface in a solid form.

The remarkable distribution of small tumours among the favous pustules, when the disease appears on the scalp, noticed in the preceding quotation, is not confined to the P. favosa, but sometimes occurs in the others,

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* ℞. Argent. nitr. ℈j.
Aq. distill. ℥j. M.
℞. Cupri Sulph. ʒj.
Aq. ferv. ℥ss. M.

where much irritation is present; and here they do not appear to arise in the milder cases, but only where the diseased surface is very considerable, and the irritation proportionately great. The contents of these tumours after suppuration vary very much in character, being in some cases apparently healthy pus, and in others the curdy substance of scrofulous abscesses; but never resembling the viscous secretion of the disease. The little abscesses which they terminate in usually heal without difficulty, and those which have not suppurated disappear as the irritation of the part subsides.

Like Ringworm, the P. favosa spreads rapidly by infection through families of children, and it is not uncommon to see several of them inoculated from one child, around whose mouth one or two pustules may have appeared, and the contents have been applied to the lips and cheeks of its brothers and sisters, in kissing them. The breasts of the nurse are not unfrequently inoculated in the same manner. On these accounts it becomes a matter of prudence to separate the children from each other, when the disease once appears among them, or to prevent the infection of the healthy by more frequent ablutions than usual.

When a favous pustule has been produced by the application of matter in the foregoing manner, a speedy check to its course is often in our power. Its contents may be removed at once, and if the abrasion is of sufficient consequence to require, and the situation of it admits of such application, a small poultice may be applied. If this cannot be made use of, the frequently washing the part with warm water will diminish the irritation, remove the secretion as fast as it is produced, and prevent the extension of the mischief.

PORRIGO LARVALIS*.

This disease differs very little from the preceding in any of its important characteristics, and its causes may be pretty uniformly ascertained to be the same. The difference in the size of the pustule before its contents are discharged, is, I think, satisfactorily explained by the greater degree of delicacy of the skin in infancy, during which period it occurs; when, of course, the cuticle

* The Teigne muqueuse of M. Alibert; Impetigo larvalis, Crusta lactea, &c. of other authors, frequently named tooth-rash.

is sooner ruptured by any accumulation of fluid beneath it.

Notwithstanding the formidable accounts of its occasional obstinacy and duration given by some authors, it is well known only to require treatment of the most simple description; and in England, where cleanly habits distinguish almost the very lowest class of society, it should appear, that it cannot by possibility obtain the character of a formidable disease.

There seems to be a very near approach in similarity to Impetigo in the disease under consideration, as regards its external appearances. In Impetigo, the pustules appear rapidly, and in clusters; go through their course, and are followed by scabby incrustations of a nearly similar kind; the same sensations, or pretty nearly so, accompany it, though it occurs chiefly in other parts of the body, as the legs, arms, hands, &c., and is generally considerably more difficult to remove. Dr. Bateman's opinion may be adduced in support of these remarks; but it does not appear that he considered the analogy so great between the favous species and this, from his proposition to denominate it Impetigo larvalis: the points of difference, however, between the three, seem to form merely

a scale of gradation from the most active excitement, copious and extensive secretion of the vessels of the cutis, to a state assuming more of the characters of chronic inflammation.

An eruptive disease so commonly seen in infants within the first year, in the lower classes of society, and forming the only one of importance to which they are subject, excepting the exanthemata, appears scarcely to require elaborate description: the very accurate and scientific account of Dr. Willan, however, would sustain material injustice by any attempt at abbreviation.

"The Porrigo Larvalis* generally appears first on the forehead, in minute pustules, with a whitish point, set close together, and producing a redness and inequality of the surface, attended with considerable itching. The pustules break in a few days, and discharge a clear, viscid humour, which gradually

* Dr. Armstrong calls it the Tooth-rash, because it appears so frequently at the time of teething in infants. "Sometimes," he says, "it spreads all over them, and appears very much like the Itch. Sometimes it is confined to the head and face, putting on the form of large scabs or blotches, a good deal like the small-pox just after they are turned."—*On the Diseases of Children.*

concretes into thin yellowish scabs. From beneath these a discharge of fluid takes place, from time to time, and forms additional layers of scab, of a brown or blackish colour, till the forehead is completely incrusted. The scabs are in some places thick and rounded, though not very compact; in others thin or laminated, and loose at the edges. They do not separate at regular periods: if any of them be detached, the surface is presently covered by a new incrustation. The scab is alternately dry and humid. Sometimes, from a fresh eruption of the pustules, or from other circumstances, the discharge becomes on a sudden so profuse, that all the surface is laid bare, and remains for several days in a state of ulceration, emitting a thin, viscid, and acrimonious fluid from innumerable pores. Very young infants are most liable to be thus affected, and they suffer extremely from pain, itching, and irritation, when the complaint is extensive. On the cessation of the discharge, brown or blackish scabs gradually form again, and cover the ulcerated part. When the disease is about to terminate, the scab becomes dry, and sometimes whitish, and at length falls off, leaving a red, shining cuticle, indented with deep lines, and very brittle,—

hence it cracks and exfoliates, and is renewed perhaps three or four times before it acquires the usual colour and texture.

"This complaint is not always confined to the forehead. In some cases, it appears first on the hairy scalp, the pustular eruption being preceded for some weeks by the Dandriff, or Pityriasis capitis *. In other cases, it may be first observed on the cheeks, or chin, on the temples, or about the ears. Wherever the disease commences, it usually extends, in the course of two or three months, to all the parts above mentioned, and likewise to the neck or breast, so that the whole face looks as if covered with a vizor †, the nose and eyelids alone being exempt from the dark incrustation. The fluid, which perpetually distils from among the scabs, diffuses a rank, unpleasant smell, and is very acrimonious, for it excoriates the adjoining parts where no eruption had previously appeared. The trunk of the body, and the extremities, are sometimes affected in this species of Porrigo. I have seen it on the back and loins, on the arms, thighs, and legs. An eruption of numerous,

* On Cutaneous Diseases, p. 192.

† From this appearance, Dr. Willan denominated the disease, Porrigo larvalis.

small Achores is succeeded by layers of brown or blackish laminated scabs, which nearly cover all the parts affected. After a few weeks, the scabs become dry and whitish; and at length fall off, discovering a red, smooth, and shining cuticle; but the disease often returns in the same places, and exhibits the same appearances as at first. Although the eruption may commence in any of the situations above mentioned, yet it seldom remains long without affecting either the hairy scalp, the forehead, or some part of the face, where it finally settles. All the symptoms are milder in children somewhat advanced than in infants not a year old: there is less itching and irritation, and the discharge from the pustules is not so considerable; the scab or incrustation is also drier and less extensive. The complaint is chiefly confined to the forehead, temples, or cheeks; when it has disappeared from one of these places, a fresh eruption takes place in another, and sometimes the limbs are partially affected by it."

The most distressing cases of this eruption which I have had an opportunity of observing are those in which it occurs in children of a full habit, and occupies the fore part of the neck, extending from the chin and angles of the lower jaw, on each side down to the cla-

vicles; the flexures and folds of the skin of the neck where the cutis is abraded, and pouring out the adhesive discharge in great abundance, often becoming adherent during quietude and sleep, and torn apart again on the slightest motion of the head. The pain, irritation, and suffering of the little patient under these circumstances, are easier conceived than described; and the desperation with which it occasionally exerts itself to obtain relief from the itching, by tearing and scratching the part, truly painful to witness. Relief even of a temporary nature is often under these circumstances not to be obtained. If unctuous substances be applied to prevent adhesion in the folds of the skin, the itching and irritation seem to be often increased, while cold or warm poultices, though of a little effect in allaying irritation, are often followed, in consequence of their disturbing and causing too early a separation of the scabs, by tedious and troublesome sloughy sores which are difficult to heal, and sometimes leave scars behind them to a great extent.

With regard to the remark of Dr. W. in the foregoing description, as to the occurrence after, or connexion of this affection with Pityriasis, it may be proper to observe, that

the latter seems more frequently, when terminating in a form of disease more severe than itself, to be followed by confirmed scalled head, or a state resembling the advanced stages of Ringworm. There is no question as to its frequent appearance in conjunction with Pityriasis, because its constitutional causes are as liable to exist where the latter has established itself, as where the scalp is free from disease; but it is only on the principle of local irritation that the former can act as a cause of any other affection, even on the scalp; and it can by no means produce a disease so evidently of constitutional origin as P. larvalis. The disposition to *settle* on the scalp, according to the language of Dr. W., which is manifested in most instances of this disease, is merely the consequence of the irritation of the hair on the diseased surface, and the difficulty it affords to the removal of the scabs and diseased secretions.

The most experienced authorities have remarked, that P. larvalis makes its appearance with the strongest features of activity, and disposition to rapidity of extension, in strong and healthy children: but children who have been most liberally fed, and who appear to have digestive organs equal to the management of every thing administered to them,

come under this denomination; and there is every reason to believe, that so long as this continues to be the case; so long as every portion of the food is converted into nourishment, and the action of the liver and bowels preserves its regularity; so long will the appearance of this eruption be to be regarded as desirable, and as eminently serviceable in the prevention of more formidable disease.

On the other hand, it has been seen after long duration in emaciated and sickly children, with tumid abdomen and enlarged glands in different parts of the body; and hence have arisen some doubts as to its original dependence on repletion. From the observations which I have been enabled to make, however, I am not disposed to think a low state of system capable of acting as a cause of the disease under any circumstances. Mere inattention to cleanliness either, in impoverished subjects, has ever appeared capable of producing a cutaneous disease attended with any thing like that rapid pustulation and excessive discharge which characterise this. When appearing under the above condition of constitution, therefore, it will generally be found to have made its appearance long before the distressing symptoms described have been noticed.

The itching, irritation, and restlessness belonging to it, together with the discharge, will always be followed by a proportionate reduction of strength, and to a certain extent, consequently, it is capable of carrying into effect the grand and powerful remedial measure of nature, counter-irritation. The constitution of an over-fed infant is one of all others which renders the exercise of this principle most frequently necessary, and nature seems, accordingly, to provide for such necessity, by the institution of a disease like that under consideration. The common occurrence of glandular affections in conjunction with it should never be suffered to lead us to the notion of its analogy to diseases identified with original debility of constitution; for it is well known that irritation of the cutis, even of the slightest kind, is capable of effecting mischief in every gland in its neighbourhood, and the occasional enlargement of the mesenteric glands only occurs as a consequence of the continuance of the irritation of the disease and the fever and debility induced by it.

Its connexion with the process of dentition has been already adverted to, and has been so commonly observed as to have obtained for it in its milder forms the popular appellation of tooth rash. Alibert has stated, that it is

never seen after dentition is complete; but cases do occasionally occur where it continues for some months after such period, though under such circumstances, disorder of the stomach, or fullness of the system, have been manifest, or as has been stated to take place sometimes with the P. favosa, so much debility has been induced, as to render the constitution unequal to the task of reparation, and the production of healthy cuticle *.

There is ample reason for the serious consideration of the influence of this affection on the constitution of the infant, with relation to the well-known disposition to determination to the head existing at this period of life: it is more than probable, that in this point of view, its beneficial effects far exceed any thing

* In one of the instances to which I have alluded of protracted P. favosa from the too frequent exhibition of powerful purgatives, the subject, a young female in whom the disease appeared about the mouth and face, had inoculated her sisters on the same parts when this plan was instituted, and carried on for some time in conjunction with low living, without effecting the removal of the disease. On the contrary, the abraded surface, when the scab had separated, exhibited great languor of circulation, and the strength was much impaired. This state of things continued a considerable length of time, and was only removed eventually by tonics, sea bathing, and a liberal allowance of animal food.

which art can supply, and that death is averted by it in numberless instances.

With this view of the case, it will not be expected that notice should be taken of the vulgar ideas as to the mother's health, or the properties of the milk, to which nurses are accustomed to attribute mischiefs of great magnitude, if suspicion can possibly be attached, as causes of P. larvalis. It would be as great a deviation from propriety and common sense to spend many words on the discussion of the virtues of the remedy of Strack, alluded to by Dr. Willan *. We may therefore dismiss these points, and together with them all attempts to estimate the value of that important symptom, the harbinger of recovery from the disease, so much dwelt on by the former, namely, the urine of the patient assuming the odour of that of the cat †.

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* Half a drachm of the dried, or half an oz. of the fresh leaves of the viola tricolor, to be boiled in half a pint of cow's milk, and taken night and morning. This is certainly prescribing on a larger scale for infants than we are accustomed to!

† There is an offensive smell in the secretions of all the forms of Porrigo, and some other cutaneous diseases, which should never for a moment be considered pathognomonic: remove the filth, the accumulated scabs, the vermin, the products of decomposition, &c. and no smell remains.

It has been already stated, that under proper management, the disease is not found to assume an obstinate or tedious character; and though it is described as recurring at short intervals, in some instances for eighteen months together, the scabs dropping off, and the affected parts continuing to be covered with fresh crops of pustules, yet such a case is by no means of common occurrence, and when it happens, may most likely be attributed to the continuance of the original cause. Mothers and nurses are, moreover, with difficulty persuaded to employ any degree of assiduity in bathing and washing the part, from the pain which the infant suffers when it is touched, and hence the irritating secretions are allowed to accumulate and mat the hair together; and thus a ceaseless cause of irritation and inflammation is produced, more than sufficient to excite fresh crops of pustules, and thus renew the mischief.

It has been considered an extraordinary circumstance, that even in the worst cases of P. larvalis, where the disease has extended over the whole scalp and face, no marks or seams of the skin should remain on the part after recovery; an attentive observation of the pathology of the disease, however, fully explains this, as the discharge is only poured

out from the mouths of the irritated vessels on the surface, without the production of ulcerative absorption. When the cuticle is first elevated and broken by the pustule underneath, copious discharge takes place, not only on the particular point which the latter occupied, but the vessels surrounding it partake of the diseased action, and a more extensive surface of secretion is thus produced: were this not the case, the quantity of discharge would be considerably more limited.

The constitutional treatment should generally consist of mild aperients, exhibited in such doses as to keep the bowels gently acting, and effect a gradual reduction in the fulness of the habit.

Local applications should be such as are conformable to the obvious indications of nature. Instead of powdery substances, or astringent ointments, poultices, if they can be applied, should be had recourse to, and unless the disease be situated on the fore part of the neck, preferred to all other applications: they relieve the irritation of the part by encouraging the discharge from the surface, and thus furthering the object of nature, the cure is much more speedily as well as safely brought about.

In the 15th vol. of the Med. and Phys.

Journal, a case is recorded by Dr. Orme, where a strong hereditary disposition to the disease existed in a family, and became so generally troublesome, as to lead to the application of blisters to the back of the neck, at the period when in the infant it was expected to make its appearance. The experiment appears to have succeeded; and it may not be a bad practice, perhaps, in any case when the disease has established itself, and assumes an obstinate character.

CHAPTER IX.

On the Papular Eruptions of Infants and Adults, denominated Strophulus, Lichen, &c.

1. STROPHULUS.

THE above designation is applied to the eruption of pimples occurring in infants from birth, up to and during the period of dentition. The trifling variations in character and extent which it occasionally exhibits have led to a division into five species: an attentive perusal, however, of the grounds of such distinction, and some observation of the affection, enable me to see little reason for adhering to it in the present discussion; while, on the other hand, attention to the important object in view of simplifying the subject by abolishing unnecessary distinctions and multiplicity of terms, demands their consideration under one head.

Dr. Willan does not seem to have been entirely aware of the great influence of variation in the degree of original irritability of

skin in modifying the complexion of cutaneous diseases, or it is to be presumed, that, in the consideration of the subject before us, he would have preferred following this plan in treating of them. It does not require much attention to perceive that the different *species* of Strophulus, unattended by constitutional affection, depend on this circumstance, or, what would still less justify artificial distinction, on the degree of local stimulus applied to the skin. The constitutional exciting cause is, of course, pretty nearly the same in all cases where the affection, as in its severer forms, has such an origin; but there is every reason to think that the skins of infants are frequently covered with pimples from the mere operation of local stimulus, either in the form of rough clothing, or by exposure to undue degrees of heat, without the slightest derangement of internal organs.

It is by no means a common thing to see the skins of young infants free from clusters of red pimples resembling what is represented under the designation of S. intertinctus and S. confertus; and that such affections should take on an active character under bad management, or disordered stomach and bowels, is not a matter of surprise. Inattention to cleanliness seems to be also a grand cause of

such aggravation in numerous instances, and, indeed, there is reason to believe that where the latter is duly attended to, and the state of the bowels, and quantity and quality of the food carefully adapted to the age of the child, this affection rarely requires the notice of the medical attendant.

With reference to the probable origin of the majority of these cases previous to the period of dentition, and to their connexion with local causes, it may be observed, that the habits of nurses are such as lead them almost constantly to the exposure of parts of the body of the child to the heat of the fire in their frequent changes of linen, or at other periods, while the fear of exposure to cold leads them to suffer the skin to remain too constantly in contact with flannel; and from what we often see of the inability even of adults to bear either one or the other of these without a great deal of itching and irritation, we are fully warranted in supposing that the delicate skin of the infant must often suffer very considerably. In a climate like this, it will, perhaps, be always considered the safest plan to avoid exposure to cold too suddenly; but there is ample reason to suppose the opposite extreme frequently run into to the prejudice of the infant's health.

Any thing which leads to irregular determination of blood to the skin would be expected to produce this affection in the infant, and it seems, indeed, to consist of a condition of the part very much resembling that attending what has been heretofore termed miliary fever. The appearance of the pimples of Strophulus in infants about the neck and shoulders only, being confined to these parts, is often the simple consequence of the irritation of flannel; and it has, in repeated instances, disappeared as soon as the use of this kind of clothing has been forbidden.

In dividing the papular eruption of infants into so many species, and instituting such nice distinctions, it would appear that the difficulties to the inquirer in the study of these affections are materially increased, while the good which can, under any circumstances, arise from it, is exceedingly doubtful. The information at present diffused, as regards these subjects, renders the first circumstance seriously objectionable. The expense merely of Dr. Willan's work is calculated to prevent that extent of circulation requisite to enable every one to profit by his observations; and it is too much, where such expense has been incurred, to find the subject encumbered

with avoidable difficulties of the kind alluded to.

Instead, therefore, of adopting his plan of description, I should be inclined to substitute the following, as being more simple, and equally well calculated to convey clear ideas of the characters of the complaint.

"Eruptions of pimples occurring during infancy, generally making their appearance first on parts most exposed, as the face, neck, and shoulders, hands, arms, &c. but occasionally on other parts (P. intertinctus). 'When the pimples wear a florid red appearance, the term red gum is familiarly applied: if showing a minor degree of irritation and a paler hue, it receives a corresponding designation, and is termed white gum (S. albidus). The affection in its most common and simple form consists of a few pimples irregularly distributed, now and then mixed with diffused patches of redness."

If circumstances favouring determination to the skin exist in an extraordinary degree, these patches are very numerous, and the pimples proportionately enlarged, the latter being found now and then to be partly made up of effused serum, forming a minute vesicle, which soon disappears. When, to the common determination to the skin in the infant

is added the general feverish excitement attendant on dentition, this affection assumes a more aggravated form (S. confertus), and occurs more extensively in different parts of the body. The pimples in this case appear in patches, accompanied by considerable redness of the skin, are harder, and exhibit marks of more active inflammation. Under circumstances of high derangement of the secretions, and where the child has been improperly fed, it is sometimes attended with great itching, pain, and excoriation, and in this condition approaches on the lower parts of the body to the intertrigo of infants, or that abrasion and irritation of the cutis on the thighs and nates produced by the stimulus of the urine. Neglect in not frequently removing the napkins, or re-applying them after drying, saturated with the urinary salts, may be, however, capable of bringing about both the states described.

The occurrence of fever in conjunction with this eruption on a more extensive scale has led to another distinction, termed S. volaticus. Dr. W. denies that this combination is an unusual occurrence, and there appears ample reason for the opinion, that the fever is accidental, and brought about by causes of a temporary nature; and is there-

fore liable to occur wherever bad management prevails. The increased violence and extent of the cutaneous affection seems dependent on the latter, and is an effect analogous to that of the irritation of teething in the milder cases before noticed.

That the cutaneous affections of infants assuming the form of pimples should be so common is explained by the greater degree of vascularity of the cutis, and superior delicacy of the cuticle. In the formation of a pimple, an unusual degree of activity in the vessels of the spot is necessary, and this condition is one which the vascularity in question is peculiarly calculated to supply. Turgescence to a certain extent seems likewise an absolute requisite. The cuticle covering the spot readily yields to the impulse of the circulation, and a minute effusion of lymph takes place under it. This I consider to be the correct idea of the formation of a pimple; it is produced by a minute escape of lymph from a distended vessel, and not by an enlargement of an original part of the cutis, or in other words, of a papilla, as hitherto supposed.

The above peculiarities of the infant's skin may therefore be said to constitute the predisposing cause, though it explains by itself the production of the more simple forms;

while a course of management producing fulness of habit, or even what may be termed good health, rough and warm clothing, or any circumstances quickening the circulation and promoting determination to the skin, may be considered among the most prominent of those which excite it.

Enough may be collected from what has been said as to the proper plans of treatment. In a constitutional point of view, little seems requisite beyond a modification of diet and clothing, and occasional aperients; but the influence of the warm or vapour bath in all cases where the eruption gives uneasiness is both locally and constitutionally productive of the most decided advantage. In aggravated cases, accompanied by febrile symptoms, Dr. Willan recommends an emetic to be given, followed by a mild aperient, after which the decoction of bark is found useful.

The accounts of the imminent peril of checking or repelling eruptions of the kind under consideration, given by different authors, require to be received with some degree of caution. Any accidental determination of blood to internal organs must necessarily deprive the vessels of the skin of every thing like turgescence, and thus occasion the sudden disappearance of such trivial affections from the surface. Thus their disappearance may

be more frequently a consequence than a cause of internal disorder. Taking into consideration moreover the small extent of surface they occupy, and the small degree of determination to the cutaneous surface generally by which they are accompanied and supported, and also their frequent appearance from local irritation, it appears highly improbable that they are entitled to rank as efforts of nature to prevent internal mischief; consequently, that the apprehensions of suppressing them are not very well founded.

2. LICHEN.

Eruptions assuming the form to which the above designation has been attached, in adults are usually ushered in by slight febrile symptoms, particularly when extensively diffused over different parts of the body. They occur under similar circumstances with those of infants, the consideration of which occupies the foregoing pages, namely, where powerful causes of determination to the skin occur, and remain for some time in operation. Hence they make their appearance as the hot weather commences, and are followed by great aggravation, if the circulation is hurried, and perspiration brought on by exertion.

Dr. Willan defines this affection "an extensive eruption of papulæ affecting adults, connected with internal disorder, usually terminating in scurf; recurrent; not contagious:" the more common forms, however, are not uniformly dependent on internal disorder, or followed by fever; on the contrary, they seem to appear not unfrequently very suddenly, under exertion and perspiration, with every symptom of apparent good health, and disappear in the course of a short time, together with the itching and tingling belonging to them.

The analogy between this affection and Strophulus is exceedingly intimate, as is proved by the similarity in the most important of their features; and there is as little absolute necessity for its division into so many different species as in the latter. Hence the same mode of description may be resorted to with propriety.

Like Strophulus, the milder cases of this affection may be considered indicative of pretty good general health, though it is stated now and then to occur under states of great constitutional debility, when the pimples wear an appearance in colour not much unlike petechiæ.

The description of lichen most conformable

to necessary precision, without partaking of the complexity of Dr. Willan's arrangement, should be as follows:

An eruption of pimples occurring generally first in some part of the upper half of the body, as the face, neck, arms, &c. at seasons of the year when the circulation begins to be determined with unusual force to the surface of the body, as in the spring, and the approach of summer. The extent of the eruption varies considerably, according to the degree of exposure to heat and violence of exercise or labour to which the patient is accustomed, being in some cases partially diffused, and merely attended with pretty severe tingling and itching; while, in others, the eruption extends over almost every part of the body, and is accompanied by symptoms of general irritation and fever (L. simplex). The pimples are larger, paler, and showing appearances of less activity of inflammation in situations which are exposed than in others protected by the clothing; and when they occur on parts covered by the finer kind of hair, as on the chest, arms, legs, &c., they are often found to have one or more of such hairs growing from their centre (Lichen pilaris); the general disposition to irritability of skin appearing to be aggravated at the point where the hair

penetrates it. When the pimples are so situated, and frequent friction is resorted to to allay the itching and tingling, they appear to be speedily much increased in magnitude, and not unfrequently to pour out a bloody fluid round the roots of the hair. Now and then, from causes not clearly ascertained, the eruption, instead of being diffused, is limited to circumscribed patches, and hence the term circumscriptus has been employed to give this appearance its place as a species.

When any accidental cause of disorder of the digestive organs or exposure to cold has taken place, the eruption is of a more aggravated kind, and its appearance is accompanied by so much derangement of system, as to give it the character of an exanthematous fever. "The papulæ are distributed in great numbers, without any certain order, chiefly on the arms, the upper part of the breast, neck, face, back, and sides of the abdomen; they have a high red colour, and are surrounded by extensive inflammation, or redness of the skin, attended with itching, heat, and painful tingling. When the patient becomes warm in bed, the redness increases, and there is a strong sensation of burning and smarting for an hour or more, as if the parts had been severely scalded. The same effect is pro-

duced at any time by washing, especially if soap be used; also by violent exercise, or by drinking wine. In the morning, the papulæ subside, the inflammation in a great measure disappears, and no uneasiness is felt till after dinner, unless it be excited by the above-mentioned or by other similar causes. Some small vesicles, filled with a straw-coloured fluid, are occasionally intermixed with the papulæ. These arise dispersedly on the arms, about the roots of the hair, on the forehead or temples, and often on the fingers, but they soon dry and exfoliate. By a long continuance, or by frequent returns, of the heat and redness, the skin is at length altered in its texture, becoming harsh, thickened, chappy, and exquisitely painful on being rubbed or handled. The duration of this complaint and the modes of its termination are very uncertain. It sometimes continues four or five weeks without any material change in its appearance; sometimes it has an earlier termination by slight exfoliations of the cuticle; but in most instances the eruption appears and disappears repeatedly before the disease is removed. It may also by improper applications be suddenly repelled from the surface of the body. This incident is always succeeded by violent disorder of the consti-

tution. I have observed, in one or two cases, where it was occasioned by imprudent exposure to cold, that an acute disease ensued with great heat and thirst, and accelerated pulse, frequent vomiting, pain in the bowels, head-ache, and delirium. After these symptoms had continued ten days, or somewhat longer, the patients recovered, though the eruption did not return. The uneasy sensation of itching and tingling at the commencement of the disorder leads many persons to rub the affected parts too harshly, and thereby to produce fissures, or excoriations, with a considerable discharge of watery fluid. At an advanced period of the eruption, similar effects take place from the violence of the cutaneous inflammation without external injury. The ulcerated surface cannot, in either case, be readily healed by medicinal applications*."

The whole of the species of Dr. Willan may be said to consist merely of difference in the degree of violence of the disease, a circumstance which depends either on the state of the digestive organs at the time, or the share of irritability of skin of the

* Willan.

patient; the common summer rash, a local affection entirely, taking place where nothing particular exists in these respects, while the more aggravated form, as described in the quotation above, occurs under the circumstances of previously disordered constitution.

The appearance of these eruptions is stated to be sometimes followed by relief to old standing and obstinate complaints: pains in the stomach, in delicate females, are particularly specified among these, affording one among the many proofs which the study of cutaneous disease enables us to discover, of the value of counter-irritation in relieving internal organs. When occurring in circumscribed patches after vaccination, Dr. Willan thinks it ought to be considered a proof that the system has been satisfactorily impregnated with the virus—an observation, if correct, perhaps of some value; but which experience, rather than reasoning, would be likely to enable us to confirm or reject.

In the treatment of these affections mild saline aperients are plainly indicated, but medicines which determine powerfully to the surface of the body aggravate the most troublesome symptoms; the itching and tingling being particularly increased by them during their operation, while but little alter-

ation in the disease seems to be ultimately effected. A low diet and regimen, and avoiding exposure to the heat of the sun and violent exertion, are also very necessary. After the disappearance of the eruption, the state of system is said sometimes to require the use of tonics, but I doubt whether any case can occur where these would be called for, if purgatives of the kind mentioned are judiciously employed. It is evident that a gradual reduction of the strength and fulness of system effected in this way would not be followed by debility, though violent cathartics may possibly produce it, and leave a state of the cutaneous affection resembling that alluded to in the discussion of Porrigo larvalis. Here, however, there is no abrasion of the surface, and the doubts as to the necessity of tonics receive additional strength from this circumstance; in short, mild aperients, and the occasional use of the warm bath, comprehend all that is generally necessary.

From some observations which I have lately had an opportunity of making on the sulphur vapour bath, I am induced to think it a most powerful instrument in time, before of a judicious medical man in thouch, with no of Lichen, though it should mere were any mended till the bowels have bover me, for the

purpose of allaying the inexpressible irritation! But this was productive of temporary relief only; and what was worse, a more violent paroxysm frequently succeeded.

"The sensations arising from prickly heat are perfectly indescribable; being compounded of pricking, itching, tingling, and many other feelings, for which I have no appropriate appellation.

"It is usually but not invariably accompanied by an eruption of vivid red pimples, not larger in general than a pin's head, which spread over the breast, arms, thighs, neck, and occasionally along the forehead, close to the hair. This eruption often disappears, in a great measure, when we are sitting quiet, and the skin is cool; but no sooner do we use any exercise that brings out a perspiration, or swallow any warm or stimulating fluid, such as tea, soup, or wine, than the pimples become elevated, so as to be distinctly seen, and but too sensibly felt.

"Prickly heat being merely a symptom, not a cause of good health, its disappearance has been erroneously accused of producing much mischief; hence the early writers on tropical diseases, harping on the old string of "humoral pathology," speak very seriously of the danger of *repelling*, and the advantage

of "encouraging the eruption, by taking small warm liquors, as tea, coffee, wine whey, broth, and nourishing meats."—*Hillary*.

"Even Dr. Mosely retails the puerile and exaggerated dangers of his predecessor. 'There is great danger' (says he) 'in repelling the prickly heat; therefore cold bathing, and washing the body with cold water, at the time it is out, is always to be avoided.' Every naval surgeon, however, who has been a few months in a hot climate, must have seen hundreds, if not thousands, plunging into the water, for days and weeks in succession, covered with prickly heat, yet without bad consequences ensuing.

"Indeed, I never saw it even repelled by the cold bath; and in my own case, as well as in many others, it rather seemed to aggravate the eruption and disagreeable sensations, especially during the glow which succeeded the immersion. It certainly disappears suddenly, sometimes on the *accession* of other diseases, but I never had reason to suppose that its disappearance *occasioned* them. I have tried lime juice, hair powder, and a variety of external applications, with little or no benefit. In short, the only means, which I ever saw productive of any good effect in mitigating its violence, till the constitution

got assimilated to the climate, were—light clothing—temperance in eating and drinking—avoiding all exercise in the heat of the day—open bowels—and last, not least, a determined resolution to resist with stoical apathy its first attacks. To sit quiet and unmoved under its pressure is undoubtedly no easy task, but if we can only muster up fortitude enough to bear with patience the first few minutes of the assault, without being roused into motion, the enemy, like the foiled tiger, will generally sneak off, and leave us victorious for the time."

Lichen tropicus, however, as it is termed, is by no means confined to the climates from which it derives its name, it being now and then seen here, though not in such a violent form. The pimples, in such cases, only exist a short time, making their appearance with the attendant itching and tingling when great exertion has brought on perspiration, and disappearing soon after the body becomes cool. Dancing seems to be the species of exercise most likely to bring it on, and it is generally more violent when the bowels are in a constipated state.

In the spring and summer seasons many young persons are severe sufferers from this troublesome disorder, and are compelled to

forego their favourite amusement, or to pursue it in a degree not at all agreeable to their inclinations; and I have known an instance of a public performer having been compelled to forego it, though the means of obtaining a livelihood, from the severity of the attacks of the itching, tingling, &c. belonging to the disease. Saline aperients, low living, and abstinence from beer, wine, and other stimulants, are under such circumstances absolutely necessary to obtain a reasonable degree of comfort.

3. PRURIGO.

The resemblance between Prurigo and some cases of lichen renders it advisable to speak of it here, although it perhaps deserves to be considered in the majority of cases, rather as constituted of action of a chronic than active character.

The term employed to designate this affection is derived from its chief distinguishing feature; namely, the violent itching of the papulæ: and it is in many cases accompanied with such a striking similarity of phenomena to simple lichen, as to justify some doubts whether any real difference exists. It is, like

the latter, most troublesome in the spring, and at the commencement of summer, and is similarly aggravated by circumstances which have a temporary effect in inducing violent determination to the surface. In the milder cases, and where it exists only partially, the itching is not constant, but varies according to circumstances; still, however, preserving the disposition to become aggravated by exposure to heat. The pimples are described by Dr. Willan to be of a pale hue, but this is by no means the case when the itching is not present. When the latter is troublesome, considerable redness and heat of the skin surrounding the pimples is excited by the friction; and it is under these circumstances that the latter lose their florid colour, appearing to be deprived of their usual supply of blood by the irritation and increased demand of the skin surrounding them. Pimples, however, are by no means necessary to form the disease called Prurigo, according to the general acceptation of the term; mere itching only existing in the greater number of cases coming under the notice of the medical practitioner. Like the majority of other cutaneous diseases attended with itching, this sensation is much increased by exposure to heat or irritation, whether produced

by exertion or by warm clothing; and hence in Prurigo it is most troublesome when the patient is warm in bed, and when he has been induced to resort to friction to relieve a trifling degree of it. Forbearance is a grand point in all such cases, and should be suggested to the patient as a part of the management of his disease.

By far the greater number of cases of this affection which come under the notice of the medical practitioner are limited in extent, and confined to particular situations; the most troublesome being those where the generative organs and their neighbourhood are affected; and it seems that neglect of frequent ablutions of these parts is often instrumental in producing it. When occurring in other situations, some deficiency on these points is usually discoverable, and it has appeared to me a circumstance of considerable weight in determining the question, as to the effect of lodgement of the secretions on the skin in producing it, that in persons usually attentive to these matters, where ablution can be easily applied, the affection is least troublesome, while between the shoulders and on the back, where some difficulty occurs in the use of the towel, the itching is very great, and the pimples are numerous. Alibert,

on the subject of Dartre Squammeuse, appears to have described the disease as far as regards the tormenting itching and other symptoms belonging to it, with great accuracy and strength, and observes, that it is well entitled to the names of Dartre vive, Lichen ferosus, &c. which it has obtained from other authors. The lips, ears, nose, nipples, anus, and pudenda, are particularly mentioned by this author as the most common seats of the affection. He moreover observes, that inattention to cleanliness always aggravates it, and sometimes gives occasion to its origin. The latter part of his description, however, does not appear to agree with the usual history of Prurigo, but the points of difference appear as usual to be the results of aggravation from neglect of cleanliness.

A more than usual degree of irritability of skin seems to be peculiarly favourable to Prurigo whether occurring extensively, or confined to the parts mentioned, and with the exception of an inveterate form, to be hereafter alluded to, it is generally most severe in young people enjoying pretty good health.

Cleanliness and the warm bath are the most important remedial measures to be had recourse to in the treatment of Prurigo, as it occurs on the superior parts of the body in

persons with unimpaired general health; but from the neglect of the affection at its first commencement in the neighbourhood of the scrotum and anus, a chronic morbid action of the vessels of these parts is sometimes permitted to be established, in which such measures do no good, and the patient's life is not unfrequently rendered miserable by the almost incessant itching and irritation attending it.

Alibert and Dr. Willan prescribe sulphur in this affection, to be exhibited internally; it is probable, however, that this medicine has no advantage over other aperients; in any case, indeed, it is a matter of question whether medicines possessing, as this does, a power of producing determination to the skin, can be recommended on a proper principle, where the essential features of the disease to be cured are formed by the prevalence of this circumstance to a morbid extent, unless the energies of the circulation have been previously reduced by more active measures. This remark applies, of course, more particularly to the cases of young and otherwise healthy subjects, and does not admit of adoption as a guide in those cases assuming the chronic form, as in people more advanced in life.

The author of a pamphlet on cutaneous diseases, lately published, has given a case of general Prurigo of a very obstinate character, which had resisted varied medical treatment for a considerable length of time, and was ultimately cured by a plan of treatment which he had previously found successful in squamous and other affections.

" I dipped (says he) some lint into aromatic vinegar undiluted, and touched most of the prominent papulæ, bleeding as they were from the laceration of the comb (which had been substituted by the patient for the nails in scratching the part), till the sense of smarting was as much as the patient could bear, though at the height he declared it was preferable to the itching. I then sent him the following ointment:

℞. Sulph. Sublim.
Picis. Liquidæ
Axung. Porcin ā lbss.
Terræ Cretos ℥iv.
Hydrosulph. Ammon. ʒij.
M. ft. Unguentum.

I desired him to apply this ointment liberally over the whole extent of the eruption, to renew it every day, and wash it off every other day; I gave him four grains of pil. plummer every night, and five drops of sol.

arsenic three times a day. Wine, salt provision, shell-fish, and every stimulating article of food were forbidden.

"During the second night after these applications he slept above four hours, and the itching was considerably abated during the day. In three days the acid was applied a second time, and afterwards a solution of the argenti nitras every third or fourth day previously to the ointment.

"In less than three weeks the patient was very comfortable, the eruption having nearly disappeared, and the itching being entirely removed. The pills and solution were continued for three weeks longer, during which time a lotion of Hydr. oxym. in Sp. vini rectif. was applied two or three times a day instead of the ointment."—The success of this treatment may be considered as a proof that the organized state of the pimples of this disease hereafter to be more particularly alluded to is the chief cause of its obstinacy and long duration.

The pimples of Prurigo are stated to be observed in aggravated cases, now and then terminating in pustules resembling those of Scabies; and Alibert's description before referred to contains remarks on its assuming the character of extensive exfoliations of

cuticle, leaving a moist, shining, reddened, and inflamed skin. Where an utter neglect of cleanliness in the habits of the patient at its commencement, and inattention to proper medicinal remedies exist, this occurrence is not improbable; it is, however, from what information I have been able to collect, extremely rare, even in the very lowest and dirtiest classes of society. It may be remarked, further, that in cases where Prurigo has been much aggravated by inattention to cleanliness, the itch is a disease to be often expected, as a thing of course, arising out of the habits of the patient; it is not, therefore, a matter of surprise that sulphur, as stated by Dr. Willan, should be the most effectual remedy.

The more formidable and distressing cases of this disease, denominated P. Formicans and P. Senilis, do not appear to require a separate consideration, because there are no points of importance in which they differ, except that hereafter to be described as consisting of semi-organized pimples mixed with others: the degree of itching attending, and the tingling or sensation of creeping insects, from which the former term is derived, being often referred particularly to the pimples of this description. The consequence of scratching violently any of these pimples, namely, the

formation of a small blackish scab, is similar to what happens from this step in common cases, nor does there appear to be any ground for the opinion, that constitutional causes are more frequently concerned in producing them than the milder forms.

Dr. Willan expresses his conviction, that Prurigo, at its commencement, is not allied to itch: Alibert has also drawn a line of distinction between them; and from the common effect of determination to the skin being to produce itching, though in a minor degree, it should seem that no reasonable ground of suspicion of such connexion could have existed on this account: it is moreover now pretty well understood that itch is a disorder of the skin entirely dependent on the habits and operations of an insect to which Providence has allotted this part of the body for occupation and subsistence. It is not improbable, however, that many cases answering pretty correctly to the description given of the worst cases of Prurigo may have been those of genuine itch.

There is great variety in the plans of treatment recommended to be instituted for the relief of Prurigo. The state of constitution under which it occurs should always be borne in mind: if it be such as to admit of the use

of purgatives to a liberal extent, the local affection will be much relieved by them. The milder cases, and for the most part those occurring in young people, are of this description; but alterative and sudorific remedies are rarely at first admissible in any instance. Bleeding has been followed by temporary good effects in some cases. The Harrogate bath has been also found a good remedial measure *, but that of sulphur vapour, to which I have before alluded, is entitled to the preference. Of the *modus operandi* of the latter, in this as well as some other diseases, I shall speak more fully hereafter.

The suspicion which has been entertained by Dr. Willan, that Prurigo is produced by a peculiar insect, does not appear to have been confirmed by subsequent observation. If it had been correct, indeed, it is evident that a considerably less equivocal effect would have

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* Artificially made as follows:

℞. Sodæ Muriat. lbij.
Magnes. Sulph. ℥iij.
Potass. Sulphuret. lbj.
Aquæ cong. xxxiv.

The salts must be first put into two-thirds of the water cold, and when dissolved, the sulphuret of potash added; then the remainder of the water boiling: to be used at 98.

Wilkinson.

followed the application of sulphur in the treatment of the disease.

The parts particularly noticed as the seats of violent itching sensations, usually unaccompanied by papular eruptions, are the verge of the anus, perineum, scrotum, prepuce, and glans penis in men, and pudendum in women; and in the latter it sometimes particularly affects the extremity of the urinary passage. The itching of the nose is another instance of this kind; its causes, namely, disordered states of the stomach and alimentary canal, are not unfrequently ascertained to give origin to the affection in the before-mentioned situations.

Attentive examination of the parts when the irritation is present (for it is in no instance, even of the most aggravated kind, incessant) always discovers much redness and scurfiness, as well as fluid secretion. In the neighbourhood of the anus particularly, there is very generally more moisture secreted than is consistent with health; and the folds of the skin at the extremity of the rectum, in aggravated cases, pour out a glutinous fluid apparently possessing properties of a highly irritating nature. The perineum and posterior part of the scrotum partakes of the

disordered action, till at length, by the constant friction employed, the whole of these parts become abraded, and a copious discharge of fluid takes place, which for a time somewhat diminishes the itching, and substitutes for it a considerable degree of smarting and tenderness. More trifling degrees of Pruritus than these detailed are unquestionably produced sometimes by ascarides, but these are easily enough removed: the state described appears to be dependent on a certain derangement of the fluid secretion of the part, of the causes of which we at present possess but little information.

If no obvious cause exist in the constitution requiring alterative aperients or tonics, and local applications appear to hold out the only chance of advantage, they should be selected from among those known to possess the properties of correcting diseased secretions without acting merely as an astringent or sedative. It should be remembered that the result of more recent experience at present recorded justifies the opinion entertained by Dr. Lettsom, that the sudden suppression of affections of this sort are deleterious to the constitution, and even capable of producing fatal effects. Applications of the latter kind,

moreover, do not appear to do any permanent good in allaying the most prominent symptom.

Lime water, solutions, or ointments of opium, tar ointment, &c. have been used with various success; but ointments of any kind are inferior to lotions, inasmuch as their application favours the accumulation of the diseased and irritating secretion on the part. Lotions of prussic acid, particularly where abrasion has been produced by scratching, are very beneficial; but their effects are in general only temporary.

The most uniformly beneficial system of management consists of a simple and unirritating diet and saline purgatives, with the local application of lotions of calomel and lime water. When the pruritus is concentrated about the verge of the anus, a pledget of lint dipped in the lotion should be introduced into the rectum, and retained there, while the adjacent parts are frequently wetted with the same. The folds of integument at the extremity of the rectum are more frequently the origin of the deceased secretion than is generally supposed, and if these can be kept by ablution free for a few days from irritating secretions, and the above applica-

tion be satisfactorily made, the perineum, scrotum, &c. soon return to a healthy state.

Now and then, however, in old standing cases, where the morbid action has been a long time established, much difficulty is experienced; in which event, if we expect to effect a permanent recovery, it must be by exciting a degree of active inflammation of the part which shall be adequate to the bringing about a total change in the action of its vessels. The best application with such a view is a pretty strong solution of the hydr. oxymur., and it may be persisted in till the skin is excited to a blush of deep red, with heat and smarting. Excoriation and a little vesication may be produced in this way, and the greatest inconvenience attending it is the confinement of the patient for a few days to his room.

The Prurigo preputii of Dr. Willan, as being merely the common consequence of suffering the secretion of the glandulæ odoriferæ to accumulate on the part and become irritating, may be passed over here, as well as his remarks on the means of destruction of the insects vulgarly termed "crabs *."

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* The most expeditious and safe method of destroying these is by the free use of the common mercurial ointment.

Dr. W. has introduced some observations of Dr. Sims and others on the subject of symptomatic pruritus, or the itching of the labia, vagina, &c. sometimes attending hemorrhoids, scirrhous uteri, fungous excrescences, and other diseases in the neighbourhood, which would direct our attention to these points for inquiry whenever such parts are the seat of the irritation. Such symptoms, however, are by no means so constantly attendant on these diseases as to be of much value in their diagnosis.

In a former page referring particularly to Lichen and Strophulus, a minute effusion of coagulable lymph was stated to be necessary to the formation of a pimple. When such effusion has taken place, the turgescence of the vessels concerned being diminished, the inflammatory action giving rise to it is also reduced, and the pimple is rapidly absorbed: the general disposition to determination to the skin still continuing, however, other vessels in the neighbourhood undergo the same process, and in this way successive crops of pimples continue to be produced. In infants this state of things is often allowed to be passed over without notice, till it assumes a character of material interference with the general health; when the injudicious wrap-

ping with flannels, heated apartments, cramming with food, and consequent disorder of bowels, or the increased irritation of teething, are discovered; and the disappearance of the affection is generally the result of measures directed to these points: but from the very gradual manner in which Prurigo comes on, from its being for a considerable time alleviated by friction, and consequently treated lightly or neglected, and from the continuance of the local or constitutional cause, the pimples here undergo a change, which amply explains the obstinacy which sometimes characterises it. A degree of chronic inflammatory action in the vessels becomes established, and the pimples, to a considerable extent, instead of being rapidly absorbed, undergo a kind of semi-organization, and become permanently the seat of tormenting itching, much increased by exposure to heat. Pimples of this kind contribute, as before observed, largely to make up the eruption of the aggravated cases described under the designation of P. Formicans and P. Senilis, and are only to be speedily removed by measures which destroy their organization. Pencilling with caustic appears to be the least painful method of effecting this object; a little patience in its application will enable us to make it very

effectual, and it does not appear to be productive of any kind of inconvenience; but in the case of Mr. Wilkinson, quoted in a former page, another plan is detailed of carrying the principle into effect.

It is highly probable that the terrific description given by M. Alibert * does not apply to any even of the most severe cases occurring in this country; and I do not recollect that any case has been recorded elsewhere of its existence from birth, of its extending through families, or being hereditary: unless any particular state of skin may be the sole cause indeed, one would suppose this improbable. With few exceptions, Mons. A. has found it occurring most violently in people either of sedentary occupations, or whose habits were marked by great inattention to cleanliness; and the opinions of Dr. Willan and Dr. Lettsom, as to the danger in suddenly checking the disease, are confirmed by his experience; its disappearance having been sometimes followed by delirium, and by marks of congestion in internal organs, and also by general anasarca in cases under his notice in the hospital of St. Louis. In attending to one or two of the milder cases of this disease, I have

* Annuaire Medico Chirurgical.

been led to suppose, and it is an idea which the observations of the authors quoted tend much to confirm, that the employment of the mind in an active manner is useful in warding off many of its attacks; in one instance, indeed, the patient himself was so convinced of its efficacy, as to suffer it to guide his conduct. He found that any conversation or reflection on the subject in which his mind was much engaged would be sure to bring on the attack, while unusually interesting business, or diversion, procured him a respite as long as they lasted.

CHAPTER X.

ON URTICARIA, OR NETTLE RASH*.

THE classification of Dr. Willan places the varieties of nettle rash among the exanthemata, while the Eczema Mercuriale, a disease almost as frequently accompanied by febrile symptoms, and considerably more regular in its progress and decline, depending too, very frequently, like Urticaria, on causes affecting the skin, through the medium of the stomach, is placed with small-pox, &c. in the order vesiculæ. In this arrangement, one instance is presented out of many, which will occur to the reader, of the difficulty of classifying cutaneous diseases, so as to comprehend at once their constitutional causes and symptoms, and local characters. Even if our knowledge of the precise states of constitution under which they occur was complete, it is much to be

* Dartre erythemoide of Alibert.

questioned whether an arrangement could be formed upon it of superior utility to that of Dr. Willan, notwithstanding the objections which have been raised against it.

With a view of adhering to a general arrangement according to constitutional causes, I have placed Urticaria here. It is obviously allied in this point of view to the preceding affection, consisting chiefly of that species of determination to the skin, produced by sympathy with the stomach, or by local irritation, and may be also equally beneficial to the constitution.

The appearances of Urticaria are generally pretty well known. It is an affection so familiar, as rarely to give occasion for the attendance of the medical practitioner, except accompanied by symptoms of constitutional derangement, and in by far the larger proportion of cases this does not happen.

It consists in its more common form of patches of inflammation, distributed here and there on different and sometimes distant parts of the body: these patches are in some cases small in extent and number; in others they are large, and each patch occupies a considerable portion of the skin. In the centre of the inflamed and reddened skin, which itself is not elevated, is situated a white irre-

gularly formed spot, considerably raised above the surrounding cutis, which varies greatly in figure, being sometimes long and narrow, at others broad or round. It is perfectly destitute of colour, and severe sensations of itching, smarting, and tingling, are commonly referred to it. If the finger be drawn lightly over it, it presents much irregularity of surface to the touch, and its margin is also very irregular. The smaller inflamed patches not unfrequently exhibit this white protuberance in the form of small, distinct, circular tubercles, about the size of a spangle; but, generally, if more than two or three of these exist on a particular spot, they run into each other, and produce a lengthened stroke or weal. Many, if not all, of the larger spots or wheals, are formed by the clustering together of the circular tubercles mentioned; and, in proportion to their size, they are surrounded by a more or less vivid inflammatory redness, and a corresponding degree of increased heat, itching, and smarting, attend them. In whatever part of the skin they occur, they are seldom found to continue long, and are frequently so evanescent as to appear in one part of the body, and be visible only for a few minutes, leaving no vestige of their existence behind them; while, in a short time,

a distant part will be found occupied by them to a considerable extent. The efflorescence forming the greater portion of the patches is evidently the result of simple excitement of the cutaneous vessels, but the white, elevated spots in the centre, which resemble the effects produced by the sting of the nettle, have never been accurately examined or described; and I am not aware that a fluid exudation from the vessels of the surface of the cutis has ever been considered necessary to their formation. This fact, however, is sufficiently manifested on puncturing them with a finely pointed instrument; the fluid readily escapes and allows the elevated cuticle to collapse and fall into contact with the cutis. The difference between these spots, therefore, and the vesicles of herpes, appears simply to depend on the circumstance of the fluid exudation of the former not being sufficiently extensive to separate the cuticle entirely from its attachment to the cutis.

Notwithstanding the very general origin of Urticaria in temporary or accidental disorder of the system, it often occurs as an idiopathic affection, or, in other words, as a consequence merely of extraordinary irritability of skin; and hence some persons can produce it with slight friction on any part of

their body, even where no suspicion of the slightest derangement of the function of any organ can be ascertained.

Though now and then occurring in debilitated constitutions, and in persons affected with visceral disease, a state of pretty good general health seems to be most favourable to its appearance. A full habit of body is one of the circumstances which act as an exciting cause, where the preternatural disposition to irritation in the skin alluded to is known to exist.

In the severer and more extensive cases suddenly produced by substances received into the stomach, the tumefaction is often greater about the neck and face than other parts, not unfrequently closing up the eyes, and obliterating every vestige of the natural features of the patient, a state frequently referred to the eating particular kinds of fish; but, in more trifling cases, the substance or liquid to which it is attributed, is often such as others, and perhaps the patient himself, may have been in the habit of partaking of on former occasions with impunity. So that it may depend on mere idiosyncrasy, or a state of stomach, or of the secretions, existing only temporarily. Much difficulty will exist in such cases in ascertaining to which

of the articles forming the patient's diet the mischief is to be attributed; and there seems to be no more speedy method of arriving at this discovery than that of omitting first one and then another for a day or two, and watching the state of the complaint during the period such changes are being made.

The high degree of tumefaction above mentioned is not generally produced by any of the ordinary articles of food or drink, but usually follows the reception into the stomach of such as the patient is not constantly accustomed to. Almonds, mushrooms, cucumbers, honey, fruits of different kinds, opium, &c. have been particularly noticed among these; but the poisonous properties of fish, in a particular state, not well understood, is its most common cause. Mussels and lobsters seem to have been most frequently possessed of this property, and several fatal instances have occurred of their deleterious power. There is ample reason to believe that the commencement of the putrefactive stage in the fish generates the poisonous properties in question; and from my own observation in one or two cases, as well as from the report of a medical friend, who has many years resided in the neighbourhood of Thames-street, I am indeed inclined to consider it in the light of an esta-

blished fact. The lower classes of people, both men and women, attending the fish markets, are constantly affording cases of this kind, and, indeed, it is so common as to excite but little alarm. It is generally ascertained to have been produced in such cases by eating the refuse of the market, or the cheaper kind of shell-fish, particularly the mussel.

The poisonous properties in question are by no means confined to the fish of this climate; it is more common, as well as more violent, within the tropics, both in the neighbourhood of land, and many degrees out at sea, and hence an important obstacle arises to the belief of its dependence on any particular species of sustenance which the fish may have obtained.

Dr. Burrows * has given a list of the different kinds of fish which are found to have been occasionally poisonous: the yellow-billed sprat, however, has been noticed as the only species which has produced immediate death within the tropics. From the result of the

* An account of two cases of death from eating mussels, with some general observations on fish poison, by G. M. Burrows, &c. &c.

consultation of different authors, who have been quoted by Dr. B., with regard to the supposed seat of the poison in particular parts of the fish, it appears that no foundation exists for the belief that any part of it can be eaten with safety, when another is tainted. Two cases of Urticaria, alluded to in the third volume of the London Med. Repository, were supposed at first to be produced by merely eating the skin of the dried herring, but the patients were subsequently ascertained to have eaten the fish itself; and two inferences of some importance have very properly been drawn from these cases by Dr. B.; namely, that as two persons, *not related*, ate of the fish, the effect was less likely to be the result of idiosyncrasy, and, that the process of pickling and drying does not destroy the poison. The gall-bladder and liver, stomach and intestinal canal, have been supposed, with as little apparent reason, to be its exclusive seat; and the weight both of evidence and reasoning seems to be decidedly in favour of its distribution over every part of the fish, and of its not being dependent on disordered secretion of any particular organ.

The idea that impregnation of the circulation and solids of the animal with copper is

consistent with life is in itself exceedingly absurd, and yet among the various strange conjectures as to the cause of the poisonous properties of the fish, this is spoken of by scientific men in systematic works on the science of medicine, as the most rational explanation of the fact. It is true that copper, in the form of solution, received into the stomach, produces many of the symptoms attendant on fish poison; but, in such cases, the grand characteristic of the latter is absent; there is no urticaria: and if the stomach takes the alarm, and instantly rejects the obnoxious fluid (and it so constantly does so, as to justify the use of the solution, under particular circumstances, as an emetic), no symptoms of disorder remain even for a single hour after it has been administered.

The evidence brought forward by Dr. B. in the publication above alluded to is in itself, I think, very conclusive against the theories of the origin of this affection in the secretions of any particular organ, or of the residence of the poison in any particular part of the fish. There is, moreover, ample reason to doubt that even a disordered state of the health of the animal during life (except as increasing the disposition to putrefaction after life is extinct) can have influence in inducing the

mischief. The following facts may be reckoned among those which justify such doubts.

In February, 1813, the East India ship Lady Castlereagh arrived at St. Helena, and was detained a considerable period waiting for convoy. During this time the crew were employed occasionally in catching mackerel, and they usually obtained a liberal supply for their daily consumption. For the space of several weeks, under the continuance of this practice, no instance of disorder occurred; but when the time for sailing approached, a large number of the men were induced to make attempts at pickling and drying, and thus obtaining a store for their homeward-bound passage. They succeeded in this plan very much to their satisfaction, but were induced to regale themselves with a dinner off the produce of their industry before the ship sailed, when no less than sixty were seriously affected. Vomiting, with extreme violence, general febrile symptoms, and urticaria about the face and neck, with immense tumefaction, occurring in every case. The officers and persons who only partook of the fish when fresh caught were never affected. Hanging the fish up in the moonlight, in the drying process, was the only explanation occurring to the minds of the seamen of the cause of this accident!

The following symptoms are stated to have occurred in fatal cases from eating mussels:—Sickness and vomiting of a great quantity of dark-coloured matter, and subsequently of a dark-green fluid; the urticaria covered the skin, and was attended by intolerable itching; great difficulty of breathing came on the second day; tormina, intense thirst and swelling of the abdomen and face followed, and the extremities gradually became cold and benumbed; the countenance became of an ashy paleness; and the pupils were extremely dilated; respiration difficult, insatiable thirst, quick, low, and tremulous pulse, and subsultus. In one instance death was preceded by severe convulsions.

The fish were obtained in these cases under circumstances unequivocally justifying the conjecture that the putrefactive stage had fully commenced*. The severer symptoms did not make their appearance till the day after the fish had been eaten; but in ordinary cases vomiting soon comes on, and it is therefore not improbable, that death is averted in

* For further particulars of these cases, as well as for a very able inquiry into the subject of fish poison generally, I must refer the reader to Dr. Burrows's pamphlet.

many instances, by the readiness with which the stomach rejects the poison.

"In ordinary cases, an hour or two after it has been received into the stomach, a sense of weight and oppression is referred to this organ, with nausea and vertigo, universal uneasiness, numbness of some part or parts of the body, constriction of the throat, a sense of heat about the head and eyes, quickly followed by urticaria and great tumefaction; immoderate thirst, and an eruption and itching on the skin in other parts, and vomiting, and now and then diarrhœa."

The most direct means of relief consist of assisting nature in her efforts; first, by unloading the stomach with emetics, and afterwards, by the exhibition of brisk cathartics. If the symptoms are violent, the sulphate of copper, on account of its quickness of operation, seems best adapted to accomplish the first of these objects, and powdered jalap, for the same reason, should be selected for the second.

The lower class of people who work in and about Billingsgate are, as before observed, very subject to this accident; and a general idea prevails among them, that large quantities of vinegar are calculated to check the violence

of the symptoms; they are accordingly accustomed to drink it to a great extent as soon as they are made aware of the commencement of the disorder. I am not aware whether sugar has been tried as an antidote in any instance in this country, though from Dr. Burrows' account, it has been employed with success by one gentleman in numerous instances. Ether, in doses of twenty, thirty, or forty drops, given every half hour, is also mentioned as a remedy of great efficacy. In the slighter cases, produced by eating fish, if the disease is left to itself, the irritation and tumefaction begin to subside at the end of thirty-six or forty-eight hours, and it never reaches the duration of common febrile nettle-rash occurring from other causes.

The febrile nettle-rash is thus described by Dr. Willan.

" The symptoms preceding the eruption are pain and sickness at the stomach, headach, great languor or faintness, with a disposition to sleep, a sense of anxiety and increased quickness of the pulse, and a white fur on the tongue: in two days, or sometimes later, after these symptoms, the wheals appear, with an efflorescence in patches of a vivid red, or sometimes nearly of a crimson colour. They are preceded by fits of coldness and

shivering, and are attended with a most troublesome itching or tingling, which is greatly aggravated during the night, and which prevents rest for many hours. In order to avoid this inconvenience, I have known many persons sleep on a sofa without putting off their clothes, as their distress begins immediately on uncovering the body. The patches often coalesce, so as to produce a continuous redness: they appear on most parts of the surface, but they are diffused particularly on the shoulders, loins, nates, thighs, and about the knees. They extend likewise to the face; and there is sometimes a red circle round the palm of the hand, accompanied with a sensation of violent heat. They appear and disappear irregularly, first on one part, then on another, and they may be excited on any part of the skin by strong friction or scratching. During the day the efflorescence fades, and the wheals in general subside, but both of them return with a slight feeble paroxysm in the evening. The red patches of efflorescence are often elevated above the level of the adjoining cuticle, and form dense tumours, with a hard distinct border: the interstices are of a dull white colour. When the patches are numerous, the face, or the limb chiefly covered with them, appears tense

and considerably enlarged. At the latter end of the disorder, the eyelids are red and tumefied, and there is often a swelling and inflammation on the sides of the feet. On the appearance of the eruption, the pain and sickness at stomach are in general relieved; but when it disappears, those symptoms return. The whole duration of the febrile nettle-rash is seven or eight days. As the eruption declines, the tongue becomes clear, the pulse returns to its usual state, and all internal disorder ceases: the efflorescence exhibits a light purple or pink colour, and then gradually disappears, being succeeded by slight exfoliations of the cuticle."

In the febrile nettle-rash, though the cutaneous affection is very severe, the constitutional condition should obtain the greatest share of the notice of the medical attendant. A more than usually severe attack of the febrile symptoms, in a constitution impaired by hard labour and intemperance, proved in one instance, recorded by Dr. Willan, very suddenly fatal, the abrupt disappearance of the eruption being followed by increase of the fever and delirium.

The sudden disappearance of the eruption of urticaria, where even slight symptoms of general irritation exist, may generally be

considered an exceedingly unfavourable occurrence, particularly if the former has been very extensive, as there is no reason to doubt that in such cases it has a most important office to perform in the economy. Of many other cutaneous eruptions it may be safely considered, that the degree of danger of a sudden check to their progress depends somewhat on the existence or absence of disposition to mischief in any internal organ: such organ being that which evinces its latent disposition in this respect under such circumstances; but with regard to extensive eruptions of urticaria, from what I am able to collect, a considerable aggravation of the general febrile symptoms, with delirium, is the most common bad consequence, where their sudden suppression has been observed. It has been usual for medical writers, on the subject of suppressed eruptions, to direct measures for the restoration of the latter to the surface; and sudorifics and the warm bath comprehend what is usually thought advisable with this object in view. If, however, we are to consider eruptions of the kind under consideration as efforts of nature to avert evils of greater magnitude; in other words, as means by which a dangerous determination of blood to internal organs is to

be prevented, such measures are obviously inadequate, and too tedious in their operation for the purpose, because when the determination to the surface ceases, that to the organs alluded to may very generally be supposed to have begun: it should seem, therefore, that vesicatories of such kind as are quickest in their operation are entitled to a preference over other measures, as being capable of producing a state of determination to the skin approaching in similarity to that constituting the original disease of the part. As will be hereafter noticed in treating of Herpes, blisters may be rendered very useful in anticipating, as it were, the intentions of nature; and there does not appear any sound reason why they cannot be employed with propriety where she has so obviously made an effort to accomplish an object, as is exemplified in the institution of Urticaria. Where, therefore, this affection has been suddenly suppressed, one of the first objects ought to be to provide against harm by the application of blisters, and this principle may be advantageously acted on in all other points, which the circumstances of the case are composed of.

The state of the febrile symptoms, where the eruption is unrepelled, will point out

such measures as the case requires; but it should be always borne in mind, that morbidly increased determination to the skin constitutes some of the most troublesome parts of the disease; and medicines, therefore, which increase this, such as sudorifics, ought not to be employed. The bowels should be copiously evacuated, and kept open by sulphate of magnesia exhibited at proper intervals, perhaps every four hours, alternately with the nitrate of potash, in pretty large doses. By this plan of treatment, the cutaneous irritation, as well as the febrile symptoms, will be kept under, and any cause of the affection connected with fulness of system gradually got rid of: the principles on which it is founded apply to almost every case of nettle-rash, whether accompanied by fever or not; but it is of essential importance that a corresponding diet and regimen should be observed at the same time.

Distension of the stomach, even if effected by the mildest and least irritating substances, or liquids, has appeared, in many cases, to be a cause of nettle-rash; and it is not improbable, that in delicate females, it has given occasion to the most obstinate and protracted cases of this affection, where the medical attendant has been defeated in every attempt

to find a remedy. I have lately had an opportunity of seeing a case of this kind in a young female answering to this description, who, as I had been informed, had consulted and followed the prescriptions of various medical men of reputation, for the last three years, without material change in the troublesome character of her disease. Every variation in diet had been had recourse to, and various plans of medical treatment had been tried: she had been at one time much reduced by aperients and low living, at another directed to live on animal food and take wine. A vegetable diet had been found most consistent with comfort, but had not been attended by a complete eradication of the disease. Inquiry into her habits, as regarded her appetite, and the frequency of her meals, led to the idea above mentioned, and she was directed to eat oftener, and limit the quantity at each meal to four or five ounces; to use the tepid bath twice a week, and have recourse to a saline aperient occasionally. Under this plan of management she has been secured from any further annoyance, though now and then admonished by a spot or two, after any infringement of its rules. One of the cases of an obstinate character, detailed by Dr. Willan,

seems of a similar kind to the foregoing, though it is possible that preternatural irritability of skin may have stood in the situation of a predisposing cause.

Cases now and then occur, where the white prominence remains, accompanied by itching, after the inflammatory redness of the cutis disappears; and these have given rise to the designation by Dr. Willan of Urticaria perstans. Another species (U. conferta) seems to have no peculiarity of importance,—"the eruption is full and extensively diffused; the wheals in many places coalesce, or are indented by close contact; they have very irregular forms; when they are singly considered, however, their size and elevation are, perhaps, less than in other species of Urticaria." Moderate doses of the aq. kali puri in the former, and the application of ung. calcis. hydr. alb. in the latter, are stated to have been productive of benefit.

The U. evanida, as it has been termed by the last mentioned author, derives its distinguishing epithet from its temporary appearance and sudden removal; it is the most trifling form which nettle-rash assumes. The observations as to the treatment generally, contained in the few preceding pages,

comprehend every thing necessary on these variations.

The U. subcutanea and tuberosa appear to demand particular consideration on some points in their characters; but affections answering the descriptions given under these names, by Willan and Bateman, are extremely rare. "The Urticaria subcutanea is a sort of lurking nettle-rash that is marked by violent and almost constant tingling in the skin, which, from sudden changes of temperature, mental emotions, &c. is often increased to severe stinging pains, as if needles or sharp instruments were penetrating the surface. These sensations are at first limited to one spot in the leg or arm, but afterwards extend to other parts. It is only at distant intervals that an actual eruption of wheals takes place, which continue two or three days without producing any change in the other distressing symptoms. In persons so affected, the stomach is frequently attacked with pain, and the muscles of the leg are subject to cramps. It is relieved by repeated bathing in warm sea water, and gentle friction.

"The Urticaria tuberosa is marked by a rapid increase of some of the wheals to a large size, forming hard tuberosities, which seem to

extend deeply, and occasion inability of motion and deep-seated pains. They appear chiefly on the limbs and loins, and are very hot and painful for some hours; they usually occur at night, and wholly subside before morning, leaving the patient weak, languid, and sore, as if he had been bruised or much fatigued. It seems to be excited by excesses in over-heating by exercise, and the too free use of spirits, and is often tedious and obstinate.

"A regular light diet and a course of warm bathing are to be recommended, with occasional gentle laxatives, where the organs of digestion appear to be deranged."

I have observed a few cases of a disease answering to this description in most points, but never found the measures above mentioned of essential service. It is truly an obstinate form of disease, and one which, under my own observation, has often resisted every plan of treatment which sound and rational principles would justify us in adopting. The misery attendant on such cases would appear to justify experiments. I have seen obstinate cases of this kind cured by salivation.

I am not aware that any thing has been added to the above observations on these sin-

gular forms of Urticaria, since the publication of Dr. Bateman. With respect to the first, it seems clear that the deep-seated pains described are the consequences of impeded determination to the surface; and with this view of the case, it appeared to me probable that they would be much diminished by the occasional use of small blisters in different parts of the body.

I have adopted this plan in several instances with success, and am induced to consider it as of considerable value as a local remedy; there is no question, however, that the measures chiefly to be relied on are those which act through the medium of the constitution.

CHAPTER XI.

ON HERPES.

The import of the term Herpes is now generally understood to be an eruption of clusters of vesicles of various sizes, from the minutest distinguishable to the naked eye, to that of two or three barleycorns, situated upon a red and inflamed areola of skin. The term, as applied by the older writers, comprehended an extensive variety of other cutaneous affections very materially different; and Tilesius, whose observations have been inserted by Dr. Bateman in the 11th vol. of the Med. and Phys. Journal, speaks of the eruption as partly consisting of papulæ. The best authorities in England, where cutaneous diseases have been most successfully studied, however, limit it to a "vesicular disease, passing through a regular course of increase, maturation, and decline, and terminating in from ten to twelve or fourteen days. The vesicles arise in distinct but irregular clusters, which commonly appear in quick succession,

and they are set near together on an inflamed base, which extends a little way beyond the margin of each cluster. The eruption is preceded, when it is extensive, by considerable constitutional disorder, and accompanied by a sensation of heat and tingling, and sometimes by severe deep seated pain in the parts affected. The lymph of the vesicles, which is at first clear and colourless, becomes gradually milky and opake, and ultimately concreted into scabs: but in some cases a copious discharge of it takes place, and tedious ulcerations ensue. The disorder is not contagious in any of its forms."

This vesicular disease occurs in different parts of the body, and is generally preceded by marks of some constitutional derangement. Slight febrile symptoms most commonly prevail for a few days before the appearance of the eruption, but they are often not of so much importance as to attract particular attention. The patients themselves, in some cases, do not feel sufficiently unwell to complain, nor is there much apparent disorder of any natural function. It has been often seen preceded, in delicate constitutions, by great thirst and a quickened pulse, which have prevailed for a day or two, notwithstanding the tongue may be clean and the

bowels regular; but in some instances pains referred particularly to the epigastrium, and other symptoms of disorder of the digestive organs, are complained of for some time before it makes its appearance. Languor and loss of appetite, rigors, head-ache, and sickness, if accompanied by heat and hurried circulation, are symptoms particularly connected with its severest forms. When the eruption appears, these symptoms are rarely in any respect materially mitigated, but continue generally so long as the inflammation extends, and fresh vesicles continue to be produced. The deep-seated pains specified above usually take the course of the eruption, continuing to be referred to the regions of the liver and stomach, when the latter extends in this direction round the waist, as in the common shingles, or to the scapulæ, spine, and os humeri, if situated on the shoulders, and extending down the arms.

The attention is usually attracted to the cutaneous affection by a sensation of heat and tingling in the part. On examination, a blush of bright redness is discovered, in the centre of which a few small vesicles, varying in size, appear to have been recently formed; near to it, a smaller patch of inflamed skin is discovered with a smaller number of vesicles, and,

perhaps, a short distance from this another, without a vesicle upon it, or with a minute resemblance of a pimple, which, in an hour or two, becomes a perfectly formed vesicle *, and is surrounded by others somewhat less advanced. If slight pressure by the finger or any accidental means be applied at this period, no great degree of tenderness is evinced, but a sensation of pricking is experienced, which is evidently the result of distension of the vesicle; but as the disease advances, the accidental contact of any substance is apt to produce a great deal of smarting pain. Within twenty-four hours, the vesicles first appearing attain the size of small pearls, and contain a clear transparent fluid, when two or three, situated in the thickest part of the cluster, run into each other, forming a larger vesicle of an irregular shape, the areola of inflamed skin being also increased.

The inflamed spots and clusters of vesicles described extend in an irregular line from the spot in which they first appear to distant parts; thus, if the first spot is discovered on the shoulder, or back of the neck, the suc-

* It is probable that these incipient vesicles have given rise to the opinion of the existence of papulæ mixed with vesicles as forming this disease.

cessive eruptions and redness appear along the dorsum of the scapula and down the back of the arm every successive day for the first four or five, disclosing fresh spots, till the disease reaches below the elbow, by which time the transparent vesicles, described as being first formed, become opake, shrivel up, and terminate in a scab, the centre of which is in a few hours brown, and gradually adds to its extent the surrounding collapsed vesicles, which undergo the same change. The inflamed skin on which they are situated undergoes a corresponding alteration in appearance, and from a florid red becomes of a bluish colour, and loses all appearance of heat and irritation. In fourteen or fifteen days from the first appearance of the disease, the scabs fall off, leaving a tender discoloured state of the skin, which gradually disappears.

From this description, it will be obvious that the duration of the complaint depends entirely on the extent at which the eruption may arrive, and hence the answer to be given to the impatient inquiries of the sufferer should be particularly guarded till a day or two has elapsed without the appearance of a fresh crop of vesicles, for it is only under such circumstances that an opinion can be formed

as to the cessation of the excessive smarting pain and tenderness belonging to it. If the eruption is completely effected in two days, and the constitution be strong and generally healthy, the space of time elapsing between the commencement of the vesicle and falling off of the scab may not exceed fourteen days; but this is an instance of rare occurrence, the ordinary time elapsing between these periods being sometimes protracted to from twenty to twenty-five or twenty-seven days. When the constitution is much disordered, or improper applications have been used, it sometimes happens that little white sloughs occupy the sites of the vesicles, and that permanent indentations, or marks, are left in the skin after the healing process is complete.

The foregoing remarks are applied more particularly to that form of the disease familiarly termed Shingles, or Herpes zoster, the only peculiarity of importance belonging to which is its disposition to extend in a line from the spot in which it makes its first appearance, and from which its common designation is supposed to have been derived. The parts of the body on which the eruption takes this form are the back of the neck and shoulders, and the waist; but when the eruption appears indiscriminately in other situa-

tions, it has obtained a distinguishing appellation, "Herpes *phlyctænodes.*"

In Herpes *phlyctænodes*, "the eruption has no certain seat; sometimes it commences on the cheeks or forehead, and sometimes on one of the extremities, and occasionally it begins on the neck and breast, and gradually extends over the trunk to the lower extremities; new clusters successively appearing for nearly the space of a week." When occurring so extensively, the vesicles do not attain the size common to more limited forms of the eruption; they dry up, and the scabs fall off much quicker, though from fresh eruptions continuing to appear for a longer period, the duration of the disease is ultimately nearly the same. This variation in the course and character of the eruption is probably entirely accidental, and may be considered as affording another instance of the impolicy of increasing the number of distinctive appellations for mere shades of difference in cutaneous disease, where the correct pathology and best methods of treatment are precisely the same.

Willan and Bateman have omitted to notice the occurrence of this disease in infants during the period of dentition: I have seen a great number of such cases. As far as regards the pathological character of the eruption, the

description of H. phlyctænodes applies to it tolerably correctly; the tingling, itching, and heat appear, however, to be absent, for the infant does not appear to feel any inconvenience from it. The extent of the patches does not usually exceed that of three or four vesicles, situated close to each other; but the former are distributed more or less thickly over the trunk and extremities. As some of the vesicles collapse, form scabs, and fall off, others succeed them, and the disease is generally found not to disappear while the gums are inflamed and the teeth advancing.

Alibert, in allusion to herpetic vesicles, speaks of a belief which some entertain of its being infectious, and takes some credit for the assurance that such is not the fact; but there does not appear any sound reason for such a suspicion in the history of either of the forms of the affection before mentioned.

The disease under consideration, whether answering the description of H. phlyctænodes or H. zoster, is materially, as well at its commencement, as during every stage of its progress, unlike any other cutaneous affection; nor does it either in its mildest or severest forms approximate to, or terminate in, any other which has been separated from it by the classification of Willan: its being confounded,

therefore, with Eczema, Impetigo, or Erysipelas, as remarked by Dr. Bateman, could only have been the result of great inattention to its generic characters. The red inflamed areola on which the vesicles appear, and the uniformly transparent character of the fluid which they contain, together with their regular progress towards exsiccation and ultimate falling off of the branny scales which they form, constitute sufficient grounds of distinction from all others.

Among the causes of Herpes, Tilesius mentions the suppression of hemorrhoidal or menstrual discharge; sudden change of the habits of the patient, more particularly from an active to a sedentary life, &c. He has also observed it most frequently among dirty people, and natives of warm climates, and in those whose diet consists largely of oil and fish. It occurs also, he states, very frequently in marshy neighbourhoods, in autumn. "Young people from the age of twelve to twenty-five are most frequently the subjects of the disease, although the aged are not altogether exempt from its attacks, and suffer severely from the pains which accompany it. Sometimes it has appeared critical, when supervening to bowel complaints, or to the chronic pains of the chest remaining after acute pul-

monary affections. Like Erysipelas, it has been ascribed by some authors to acute paroxysms of anger *."

From what has been observed on the subject of the symptoms which usually precede the eruption, little doubt can be entertained as to the dependance of Herpes on constitutional causes, though the nature or character of such causes are involved in the greatest obscurity. It is at one time supervening on general irritation of system, marked by quick pulse, thirst, and heat; and unaccompanied by determination to any particular organ; while at another, it is preceded by unequivocal indications of disorder of the stomach, liver, &c.; and it is proper to observe, that such symptoms, whatever they may have been, are not usually observed to continue after the eruption has gone through its course. Irregularities in the habits of the individual, we are justified in pronouncing to have little effect in inducing the disease, as it is not often seen in those whose conduct is even marked by extravagance in this respect; but a sudden change in the diet, where great uniformity as regards exercise and exertion is observed, is in a great number of cases ascer-

* Bateman.

tained to have occurred. Thus persons who have been long resident in warm climates, and who during a lengthened sea voyage have enjoyed uninterrupted health, are subject to severe attacks soon after their arrival.

In the absence of any data regarding the manner in which disorder of vital organs may produce cutaneous eruptions, we are fully warranted in supposing from the symptoms usually preceding Herpes, and commonly disappearing after this eruption has gone through its course, that mischiefs of some importance to such organs are averted by it; in short, that it exerts all the influence, and is entitled to the estimation of, a natural counter-irritant. In this character it has in two or three instances, in delicate females, within my own observation, checked the progress of symptoms which had given rise to great anxiety respecting the state of the thoracic viscera.

The treatment of Herpes comprehends but little. It would be as useless to attempt, (and perhaps nearly as dangerous to succeed in such attempt) to repress it, as the eruptions of small-pox, &c. The tingling, smarting, aching and burning heat belonging to it at its height, may however be considerably reduced, and the patient's feelings rendered more comfortable by the free use of sedative

applications. I believe it is a common practice among the generality of medical men to direct such applications; and as far as inquiry goes, I have not been able to ascertain that any mischief has arisen from their use. Ancient opinions on such points are now submitted to the ordeal of unrestrained scientific reasoning and attentive practical observation; they are canvassed with that confidence which solid acquirements and observation have given to the majority of those who, at the present day, practise the medical profession; they are not permitted to restrain us from extending relief to our patients, merely from their antiquity; but on the contrary, are often only alluded to for the purpose of pointing out their absurdity.

Like the prickly heat, the eruption of Herpes can never be checked by any medicine or medicinal application; and those, therefore, which relieve the sufferings of the patient, ought not to be neglected. Solutions of ceruss. acet., or the liq. plumb. acet. dil. with the addition of alcohol, may be applied with advantage by means of wetted linen: they lessen the pains in question, *but never check the eruption in its course*. The vesicles ought not to be cut or rudely broken, such a proceeding generally rendering the separation of the scab considerably more tedious than it

would otherwise be; but if care be taken to puncture each individual vesicle early, so as to allow of the free escape of the fluid, the pain is much diminished, and the irritation sooner subsides.

The constitutional treatment consists only of mild saline aperients and low living. Sulphur, I believe, really possesses the properties attributed to it of equalising the determination to the skin, it may therefore be preferred to any other kind of medicine.

The decoction of dulcamara taken internally has been stated to be very efficacious in the cure of Herpes. The oil of the walnut kernel, the juice of the rhus radicans of Linneus, which is highly acrid and corrosive, as also the juice of the husk of the cashew nut of similar properties, are recommended by different writers as applications; they can never, however, be applied with propriety, except in those trifling spots unattended with much vesicular developement, constituting some of the cases termed Herpes circinatus; where substances possessing slightly caustic or powerfully astringent properties speedily remove the affection. It is on this principle that ink, solutions of sulphate of copper, &c. are found of considerable efficacy in removing the herpetic ringworm.

French writers entertain great dread of

metastasis from Herpes: *according to Alibert,* it has been known to extend to the mucous membranes of the nose, throat, and larynx. He mentions several instances of formidable determination to particular organs, some of which evidently were connected with cutaneous affections of a very different kind from those under discussion. According to him, these mischiefs are so common, and the symptoms supervening so distinctly marked, as to have enabled him to know at once from their characters, that repulsion had taken place, though no external marks exist! It may be as well to observe with respect to this latter assertion, that the entire disappearance of the vesicles of genuine Herpes in a few hours, or in any way besides that of exsiccation and scabbing, is an event exceedingly improbable.

As regards the pathology of Herpes, it may be said to consist of effusion of serum from the minute extremities of vessels on the cutaneous surface. It does not seem to be in any case dependent on impediments existing locally to the proper functions of the skin. The cuticle in a strong and healthy state is elevated by the fluid, and forms pretty strong parietes for each individual vesicle.

Looking at the disease as a counter-irritant, and satisfied, as we must be, of the important

office it has to perform in the animal economy, it should seem that any interference with its progress would be injudicious; and if, as observed by Dr. Bateman, it was of so trifling a character as to allow, in all cases, the patients to proceed about their occupations, or to feel little or no personal inconvenience from it; perhaps no attempt to relieve could with propriety be made: but in a very large portion of the cases denominated shingles, the pain, burning heat, and tenderness, and great extent to which it often spreads, are, to say the least of them, inconveniences of a serious character, and such as it would be desirable to diminish, as far as may be consistent with safety, and due attention to the obvious indications of nature.

It is fair to suppose that vesication is calculated to effect the purposes of nature in that state of system in which shingles occur better than any other artificial means. When, therefore, the disease is observed at its first commencement, and where only a few vesicles are formed, the course which it appears disposed to take being sufficiently manifest, a sound principle of reasoning would seem to justify the anticipation of the object of nature by the application of a strip of blistering plaster upon this part: in this way substituting the trifling and temporary inconve-

nience of a small blister, for a tedious and painful complaint.

Acting on this idea, I have in two or three instances applied small blisters to the uninflamed skin on the side of the eruption on which the latter seems disposed to extend, not only with the effect of checking such extension, but of producing a shrivelling of the vesicles already formed, and cutting short its progress altogether; avoiding at once its tediousness, and all the pain attending it. The smarting and tenderness in the vesicles near the blister are soon diminished, nor has it in the cases alluded to appeared that the blistered surface healed less readily than under other circumstances. Care should, however, be taken not to apply the blister to the vesicles themselves, as it not only fails to raise the cuticle, but irritates the cutis, and is followed by a superficially sloughy surface of the latter on the site of each vesicle, forming so many little irritable indentations, which heal very tediously.

The grand distinguishing feature of Herpes, namely, the limited size of the vesicles, seems to depend on the cuticle being bound down to the cutis by the adhesive inflammation, during that state of the vessels of the skin, marked by great heat and redness, which

precedes actual effusion of serum. Thus, when effusion takes place, it does not elevate the cuticle generally and extensively, as in erysipelas or pompholyx, but only on the precise spot occupied by the mouths of the vessels, from which the fluid escapes. Hence the pearl-like elevated form of the vesicle, and the obviously thinned and distended state of the cuticle forming its parieties.

The sense of pricking and pain on touching the apices of the vesicles is the consequence of the extreme distension existing: the tender surface of the cutis is affected, and the adhesion round the margin of the vesicle disturbed by the slightest pressure.

That the above explanation of the peculiar form of the herpetic vesicle is correct, is, I think, proved by the effect of blisters already alluded to. These applications do not fail to elevate the cuticle, and produce effusion on the surrounding uninflamed skin; but they never have this effect between the vesicles, or close to the margin of the cluster.

When the eruption is very slightand limited in extent, it is apt to assume a circular form, and hence has obtained the popular appellation of ringworm. Sometimes in such cases the vesicles are extremely minute, and then they generally dry up, and the cuticle falls off in

a few days in the shape of small exfoliations, leaving a reddened scurfy areola. Spots of this kind occur in different parts of the body, which are seldom attended to, and speedily disappear by the use of any of the applications mentioned in a preceding page.

Dr. Bateman * has confounded this form of Herpes with a different affection of the skin, which assumes this circular figure, and which is distinctly communicable by contact. I have described the latter in a former page, and have established its identity with common ringworm of the scalp: the pustular form which it assumes among the hair I have endeavoured to explain in the chapter on Porrigo Scutulata.

The whole of the varieties of Herpes are found to be more severe in warm than in cold climates: the remark applies with equal correctness to most cutaneous affections, and it is evident that the more free determination to the skin in hot weather affords an adequate explanation of this fact.

Herpes labialis and preputii, so designated by Willan and Bateman, from their situation, form two other species according to their arrangement. The first of these, a well known

* Synopsis, page 234.

symptom attendant on catarrhal fevers, and appearing often towards their termination, requires but little attention. Though now and then troublesome for a day or two, and extending round the margin of the lips, it goes through its course in a week or ten days, the vesicles becoming first turbid and yellow, then drying up on the part, and ultimately falling off in the form of scabs. Sometimes it supervenes on mere disorder of the digestive organs unattended by fever, and frequently accompanies bilious fevers, dysentery, and other acute diseases. The posterior part of the fauces is sometimes affected when it appears suddenly after checked perspiration and cold, these parts having a few vesicles distributed upon them, surrounded by an erysipelatous inflammation.

The affection of the prepuce is described by Bateman to be so closely resembling chancre as to be "liable to a practical mistake of serious consequence to the patient." The mistake to which he alludes, however, is by no means an occurrence to be apprehended, where much professional knowledge exists on the part of the surgeon or physician. At the present day no man who knows what he ought to know of the science could possibly commit such a blunder.

"The attention of the patient is attracted to the part by an extreme itching, with some sense of heat; and on examining the prepuce, he finds one and sometimes two red patches, about the size of a silver penny, upon which are clustered five or six minute transparent vesicles, which, from their extreme tenuity, appear of the same red hue as the base on which they stand. In the course of twenty-four or thirty hours the vesicles enlarge, and become of a milky hue, having lost their transparency; and on the third day they are coherent, and assume an almost pustular appearance. If the eruption is seated within that part of the prepuce which is extended over the glans, so that the vesicles are kept constantly covered and moist, like those that occur in the throat, they commonly break about the fourth or fifth day, and form a small ulceration on each patch. This discharges a little turbid serum, and has a white base, with a slight elevation at the edges, and by an inaccurate or inexperienced observer, it may be readily mistaken for chancre; more especially if any escharotic has been applied to it, which produces much irritation, as well as a deep seated hardness beneath the sore, such as is felt in true chancre. If no irritant be applied, the slight ulceration continues till

the ninth or tenth day nearly unchanged, and then begins to heal, which process is completed by the twelfth, and the scabs fall off on the thirteenth or fourteenth day.

"When the patches occur, however, on the exterior portion of the prepuce, or where that part does not cover the glans, the duration of the eruption is shortened, and ulceration does not actually take place. The contents of the vesicles begin to dry about the fifth day, and soon form a small hard acuminated scab, under which, if it be not rubbed off, the part is entirely healed by the ninth or tenth day, after which the little indented scab is loosened, and falls out."

Mr. Evans, to whom the profession is much indebted for his "Remarks on Ulcerations of the Genital Organs," observes, that this disease, except wher occurring on the inner surface of the prepuce, rarely comes under the notice of the surgeon. When on the outer surface, in consequence of improper interference on the part of the patient, or from the effect of friction of the clothes, it is often first seen in the form of an ulcer, with a yellow, or white and plain surface; the scab described in the foregoing extract having been partially or entirely removed,

I believe this is the state in which the

affection usually comes under the notice of the surgeon, whether situated on the external or internal surface of the prepuce; and if the vesicles have been recently broken, the white specks on the cutis, marking the situation of their bases, are not found to be surrounded by thickening. Nor are they to be considered, correctly speaking, as ulcerations, the only essential point in which they differ from simple abrasion consisting of the whitened appearance of their surface. This whitened appearance of the surface of the sore may be readily pronounced to indicate a state of vessels of the part approaching in similarity to those on the surface of sloughy ill conditioned sores situated elsewhere; and while the inflammatory areola continues to surround it, it often rapidly extends, and obtains a similarly thickened and elevated edge. In this state of things, it is not surprising that the influence of a prevailing fashion to consider every kind of affection of the genital organs venereal should have led to the mistake alluded to by Dr. Bateman. Since the publication of the observations of Mr. Abernethy, Mr. Evans, and others, however, it appears that not only this disease, but a great variety of others occurring on these parts, which have been also hitherto treated as venereal, are more

readily cured by common sedative applications and alterative medicines than by mercurials.

The disease termed by Mr. Evans venerola vulgaris, is said by that gentleman to be most frequently confounded with Herpes on the prepuce; but he has given us, under the head diagnosis *, ample means of distinguishing them. The herpetic disease is marked at its commencement by distinct vesicles; and if not seen at this period, or till the vesicles have been broken, and the scab rubbed off, it consists of the superficial white specks described. If it has been any length of time in existence, and subject to irritating and improper applications, or, as is often the case, passed over with neglect, while its original cause remains in full operation, it assumes the character of an irritable superficial sore.

The venerola vulgaris is in every point of view a much more important disease; it commences with the formation of a pustule, the contents of which undergo exsiccation on the spot, and form a scab of much greater solidity and dimensions than that which follows the vesicles of Herpes. This scab, instead of speedily separating, and leaving a superficial sore, adheres to the surface, and if its base be

* Remarks on ulcerations of the genital organs, p. 28.

raised up and minutely examined, it seems to be attached by means of a stringy slough, approaching in similarity to that described as attaching the scab of Rupia in a preceding page. A pretty copious secretion of matter is also found under it, which concretes on the scab already formed, and gradually enlarges it; and when the latter separates, a concave ulcer with a raised edge is disclosed, which subsequently heals by distinctly new granulations.

The cause of Herpes on the prepuce is generally understood to be disorder of the digestive organs, which may be either habitual, or brought about by temporary causes. Alteratives and aperients exhibited for a day or two, with the local applications of the liq. plumb. acet. dil. are generally found to comprehend every thing necessary to the cure. If, however, as now and then happens, the process of cicatrization is not completed by the time this plan has subdued the usual marks of irritation in and about the spot, the black lotion* may be substituted for the former with advantage.

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* ℞. Hydr. subm. ʒij.
Aq. calcis. ℥vj. ft. lotio.

The lymph of the vesicle taken from the prepuce, and inserted under the cuticle of the arm, in the part usually chosen for inoculation, has been in one instance seen by Mr. Evans followed by a vesicle of much larger dimensions than the original; "but in several later experiments the lymph has altogether failed in producing any effect;" it does not appear, therefore, that the causes of the affection here are different from those producing it more generally on other parts of the body.

Mr. Evans's observations as to the causes of H. preputialis do not confirm the opinions of Mr. Pearson or Mr. Copeland; the former of whom supposed it to be connected with the previous use of mercury, and the latter * as sometimes the consequence of an irritable state of the urethra, or actual stricture of this part.

Herpetic vesicles sometimes occur on the edges of the eyelids, accompanied by a considerable degree of smarting and itching, followed in a day or two by inflammation of the conjunctiva; the vesicles being usually very small, and distributed among the hairs of the

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* Bateman's Synopsis, page 240.

eyelids. Cases of this kind are often considered and treated as simple inflammation: on minute examination, however, the character of the complaint becomes sufficiently manifest.

The course and duration of the disease in this situation are similar to that of the smaller kinds of vesicles, situated on delicate membranes elsewhere, and it does not generally require more attention. As a matter of precaution, it is advisable to employ mild aperients and sedative lotions.

CHAPTER XII.

OF THE FURUNCULUS, OR BOIL.

Dr. Bateman has omitted the consideration of this disease of the cutis, on the ground of its occupation of a place in the works of surgical writers. Notwithstanding, however, the attention it has obtained from Richter, Richerand, Dr. Pearson, and others, there are some points to which the reader's attention may be directed, in a work like the present, with some prospect of advantage.

There are two species of boils, one of which involves the cutis and cellular tissue beneath to a great extent, forming a tumour, sometimes attaining the size of a pigeon's egg ; the other confined to, and only involving in the suppurative process, the substance of the cutis.

The former of these makes its first appearance in the form of a painful, red, circumscribed tumour, excessively tender to the touch, and generally approaching to a conical form as regards that portion of it which is raised above the surrounding uninflamed skin.

On the apex of the cone and centre of the tumour a little white speck or slough is generally observed, which is sometimes picked off by the patient, with the hope of extricating the matter underneath, but which, under such circumstances, only discloses an excavation of a corresponding size. There is reason to suppose that matter is formed in boils of this kind in two or three days after the commencement of the disease; but from its being deeply imbedded in the cutis, it is prevented from making its way to the surface by the thickening of the superincumbent structure produced by the adhesive inflammation. The matter being confined in this manner, the ulcerative absorption extends downwards rather than upwards, and involves the parts beneath the cutis, forming a much more extensive collection of matter than naturally belongs to the disease, and concealing the circumstance of its cutaneous origin.

The second form is less painful, but equally tender to the touch, very small in extent, and does not involve the cellular tissue; it is strictly confined to the substance of the cutis, and is vulgarly termed the blind boil.

Mr. Fosbrooke * has given a very valuable,

* Ed. Med. and Sur. Journ. No. 66.

and, except in one point, very correct account of this form of boil, with useful observations on the best method of treatment. He says "the features of this little disease are a dark red lenticular swelling; the inflammation is intense and concentrated; and if these little tubercles undergo pressure in the early stage of suppurative inflammation, a transparent serum is effused, probably coagulable lymph. It is slow in maturation, and pus first appears in a minute yellow elevation in the centre, the surrounding space circumscribed by the inflammatory process still continuing in a slow state of that action, particularly hard and solid. The quantity of matter discharged is not very great, and, in most cases, where the inflammation is not very obvious on the surface, it appears to act so vigorously beneath, that the cellular membrane partakes of the disease, and comes away in a small eschar." After the excavation formed by the slough is filled up, and the inflammation has subsided, it requires some time for the absorbents to remove the thickening of the part which has been produced; some languor of circulation usually remains also, marked by a blue appearance of the thickened part.

Mr. Fosbrooke thinks this disease allied to true carbuncle: perhaps the same remark

may be made with great propriety of any form of boil, the character of the disease being really the same, and the difference consisting only in extent. He does not advise "an early exoneration of the central fluid by the lancet; the knot of vessels which are throwing out an effusion in the early stage are merely irritated into increased action thereby; and parts in such a state, according to the common laws of surgery, are not exactly likely to assume, if wounded, a healthy action."

Large doses of the diluted sulphuric acid seem to have been very efficacious in the hands of this gentleman. He commences with twenty minims, gradually increasing it to one, or even two drams twice a day, very largely diluted, and he describes the effect to be a deadening of the pain, and a gradual absorption of the swelling, without suppuration.

This form of boil does not terminate usually in the formation of any considerable quantity of healthy pus, and if squeezed at any period, and the little white slough in the centre be extracted, the inflammation sometimes subsides. The slough in question does not, as Mr. F. supposes, involve any part below the substance of the cutis.

The part of the body in which it appears most numerously is the trunk, particularly on

the abdomen, while the larger boil is most commonly seen on the arms, thighs, and nates.

From the tedious progress of this kind of the disease under consideration, and from the continued appearance of fresh inflamed tubercles as fast as the first which have appeared subside, the local surgical treatment is of but little importance; the most obvious indication being to correct the state of system which produces it. Months will in some cases elapse before the disposition to the affection subsides, though moderate and even low living be adopted and strictly persevered in. The communication of Mr. F. above stated appears, therefore, to be of the greatest value. If the practice he mentions be followed by generally similar results, much pain to the patient, and trouble to the medical attendant, will be saved. The free incision even into quarters of the tubercles: poultices, fomentations, leeches, and applications tending to disperse them, however diligently applied, have been usually found far less productive of advantage than he has described the sulphuric acid to be. It would be a source of very considerable satisfaction, to be able to confirm his statement, for the disease is, in truth, of a very obstinate and intractable

nature. It may possibly happen, that the effect of this medicine is more marked where a pure and healthy atmosphere is breathed by the patient while under its influence; but it has been employed very liberally in a great variety of cases in this metropolis without any apparent advantage.

The exhibition of aperients and alteratives to the extent of a few doses, from day to day, have sometimes appeared to suspend, or entirely put a stop to, the disease; but in a great majority of cases they certainly failed to do so. I have been compelled by the results of observation and experience to place little reliance on any medicine or plan of treatment, the effects of which are limited to a short period, and hence, probably, am induced to offer a better opinion of the compound decoction of sarsaparilla and Plummer's pill than many will think they merit. They are, however, certainly efficacious when taken for two or three weeks, and often effect that which no other medicine or medical treatment appear to be equal to. Change of air, and active exertion, have, in the greater number of cases which I have observed, been evidently required with relation to the general health.

Some constitutional affection is generally

produced by the pain attending extensive formations of boils, and indeed the occurrence of a single boil of the first species is sometimes productive of much febrile irritation; such symptoms, however, do not in any case usher in the disease, and are therefore to be considered, whenever they occur, simply as its consequences; they usually rapidly disappear as soon as a free opening is made, and the matter discharged.

The same causes produce the two species or forms described; indeed it will be seen that there are no pathological differences of importanee between them; the circumstances on which the extension of the mischief downwards, and consequently the increased size of the former being, perhaps, merely accidental. Young people of full plethoric habits, and those enjoying good health, and what is termed good living, are most subject to them; and, like other cutaneous diseases, they appear in their worst forms during the spring and summer quarters, when the determination to the skin is much increased.

The same principles of treatment also are generally applicable to both, except that, as regards the smaller species, it is sometimes advisable not to wait for the tedious process of unhealthy suppuration, attempts at

dispersion of the tubercle being now and then found effectual.

The degree of pain fully justifies, and sometimes amply repays, the trouble of applying a leech to its centre; but if the disease be extensive, this plan is hardly practicable to a sufficient extent. Laying open the substance of the tubercle with a lancet, however freely done, does not appear to be speedily followed by ease, as in the other species, nor does the thickening and hardness much more rapidly subside, than if the disease had been left to pursue its course.

With respect to the common boil, where the inflammation is more extensive, and produces an enlarged tumour, but little good is to be obtained by any management but that which encourages suppuration. If it be cut into before the latter process has fully taken place, the cure seems to be rather retarded than expedited, and other boils are much more likely to occur in the neighbourhood. When suppuration has occurred, and the matter has found its way to the surface, and been freely discharged, a few days only are necessary to fill up the excavation, and restore soundness to the part.

If sulphuric acid be a medicine of such efficacy in the carbuncular furuncle, it will

probably be found of some service in the constitutional treatment of this; but heretofore the treatment generally had recourse to has consisted of purgatives and low living. The precise state of system, however, will always be found the best guide in the constitutional management of any local disease.

SECTION IV.

On diseases of a mixed character essentially dependent on active inflammation, with which the constitution is not necessarily connected.

CHAPTER XIII.

IMPETIGO.

By Impetigo is meant a state of active inflammation of the cutis, on which minute vesicles are speedily formed, the contents of which are at first transparent, but which become shortly after opaque. When the cuticle is broken so as to allow of the escape of the fluid, the latter dries on the part, leaving scabs or scales of a yellowish brown hue, varying in thickness and adhesiveness according to the quantity of the fluid discharge.

In speaking of diseases of a mixed character, it is intended merely to apply this phrase to their local appearances. Impetigo, in different cases and their stages, exhibits vesicles,

pustules, and regularly formed scales, somewhat resembling those of Psoriasis. Vesicles and pustules also alike characterise Scabies and Eczema. With respect to the latter disease, it must be confessed, that its claim to introduction here is somewhat equivocal, if the more formidable cases of it, from the use of mercury, be borne in mind: the reader will remember, however, that the object of the author is an arrangement with a view to perspicuity in the present treatise, rather than the substitution of a new classification for that of preceding authors.

Under this head, therefore, I propose to consider the varieties of Impetigo, of Scabies, and of Eczema; the whole of which, in by far the larger portion of cases coming under our notice, may be referred to local causes, while, as regards their local characters, they very much resemble each other.

The descriptions of Impetigo, which have been heretofore given, do not appear to have been founded on sufficiently minute observation of its origin and progress, and apply only to cases where the diseased secretion is allowed to lodge on the spot, become dried and hard, and, consequently, a cause of considerable aggravation of the irritation, heat, &c. which properly belong to it.

The influence of frequent ablutions, with warm water, and the removal of the secretions as fast as they are produced, effect a strikingly important change in its characters; and the progress of any case, under such circumstances and management, would have been more than sufficient for Dr. Willan to have founded a distinct species on, and even warranted the impression at first sight, that it was a different disease. There is, generally, infinitely less of that fiery redness and heat: successive crops of pustules much less frequently occur, and the duration of the disease is altogether shortened.

There are five species of Impetigo spoken of by Willan and Bateman; four of which differ from each other, merely in their degree of activity and extent; circumstances which are probably entirely accidental, and dependent either on the share of irritability of skin of the individual, or the state of the digestive organs or constitution. These are the sparsa, figurata, erysipelatodes, and scabida.

In the first, denominated I. sparsa, "the pustules are at a distance from each other; and the eruption extends, without any certain order, along the backs of the hands, the arms, neck, shoulders, thighs, or legs. After a few days the pustules break, and discharge a thin

humour, which gradually concretes into yellowish, laminated scabs. The cuticle, as far as the eruption extends, becomes reddish, rough, or scaly; and a slight discharge from rhagades or chops in various places, as well as from beneath the thin scabs, continues through the complaint; the duration of which, in the upper extremities, is seldom more than two or three weeks. When the lower extremities are affected with this eruption, it continues a long time. Small yellow pustules first appear on the instep, and then on the ancle and leg, with a violent itching. They are most numerous on the foot and ancle, and when they are broken, a considerable quantity of humour issues from small pores, around which the cuticle is rough, reddish, shining, and a little elevated. The parts affected are for some weeks covered with thin scabs, but not sufficiently so to prevent the watery discharge. When the surface appears to be healed, and the scabs are about to separate, a fresh eruption of pustules often takes place, and the discharge recommences with great heat and irritation. After several returns of the eruption, ulcers are sometimes formed on the fore part, or sides of the ancle. The ulcerations discharge a clear ichor; they exhibit a considerable, but unequal cavity, and irregular

edges surrounded by the pustules. In sedentary persons, who have passed the middle period of life, the edges of the ulcers are blackish, or of a purple hue, and the limbs become œdematous. The small pustules diffused over the surface are of nearly the same colour, and sometimes the intervening skin appears livid, or speckled with livid and red.

"The Impetigo sparsa is most troublesome when the yellow Psydracia are intermixed with small irregular vesicles, as frequently happens on the upper extremities. The complaint commences about the knuckles, and spreads along the thumb and fingers to the nails; likewise along the back of the hand, and round the wrists, to the fore-arm. Both hands are usually thus affected about the same time, and the eruption extends in some cases to the bend of the elbows, the upper arm, the neck, and the cheek. It is always succeeded by a little watery discharge, and by the formation of laminated scabs: when these fall off, the cuticle beneath remains for a long time scaly and chopped, and in this state of it, fresh pustules arise, with heat, soreness, and violent tingling. Thus by repeated suppuration, and scabbing, the texture of the skin becomes, in many places, rough, harsh, and inflexible.

"This disease generally appears in autumn, and continues through the greater part of the succeeding winter. It disappears in many cases during the summer, but returns at the latter end of the year. The eruption is preceded by some disorder of the constitution, as head-ache, indigestion, and pain in the stomach, violent pains in the limbs and back, and sometimes cramps of the lower extremities. Children, and even infants, are occasionally affected with this disease; it occurs, however, much more frequently in adults, than in children, or in persons of an advanced age. A predisposition to it is communicated hereditarily; and in those who are predisposed the complaint appears after intemperance, violent exercise, or exposure to sudden interchanges of heat and cold."

When the disease appears in the form of circumscribed patches of pustules of an irregular figure, and situated at a distance from each other, it answers to the description of the I. figurata. The hands are most frequently the seat of this more limited state of the disease, and it seems almost constantly to occur from the influence of locally irritating causes. The character and progress of the complaint are similar in other respects to that described in the foregoing quotation, though

it is sometimes, from the necessary exposure of the part, rendered more tedious. The blotches do not always spread beyond the back of the hand, up the arm, or into the palm though the pustules often occupy the interstices of the fingers at the roots of the first phalanx, and are rendered more painful and irritable by the motion of the parts, particularly if scabs are allowed to form in this situation.

The connexion of this form of Impetigo with constitutional causes is not often to be traced; and I have not been able from my own observations, or the reports of others, to confirm the remarks of Dr. Willan, of its being preceded by pains of the stomach, head-ache, &c. Indeed, as I before observed, I believe the greater number of cases are produced by local irritation*.

The description of the two foregoing species, or states of the disease, would comprehend, as nearly as any general description can do, the majority of cases which occur: the erysipelatous form occurring on the face being

* The most intractable cases I have ever met with have been caused by the imprudent use of strong alkali to the skin, for the purpose of removing particular stains.

merely accidental, while the scabida is evidently that of an aggravated case from disordered general health and neglect. With respect to the species termed rodens, Dr. Bateman states, that he never had an opportunity of seeing it, and that it is probably of a cancerous nature.

Impetigo rarely comes under the eye of the medical observer at its first commencement; and I am inclined to think, that, at this period, the term pustule is improperly applied to its chief feature, the fluid which the vesicles contain being transparent, though the change to opacity takes place in a few hours. The vesicles are sometimes broken at this period, when the fluid which they contain concretes on the edges of the little excavation which they occupied; and if the part be at this time minutely examined, the excavation will be found lined with this incrustation, while other vesicles are forming by the side. In this way the disease extends in a circular or other form, till a sufficient abrasion of surface is produced to furnish the materials of a scab.

In the treatment of Impetigo, the frequent removal of the diseased secretion has never been considered of sufficient importance: the benefit of this step, if carried into effect by

frequent ablution of the part with warm water, is incalculable. By this plan, in conjunction with the exhibition of simple alteratives, entirely rejecting any thing in the shape of ointments, or other greasy applications, the disease will be often readily subdued. The part may be kept in a state of moisture at other times by covering it with oilskin, or by the application of soft linen wetted in the liq. plumb. acet. dil.

If these means prove inefficacious, the Harrogate waters, or the internal exhibition of sulphur in any other form, are recommended. Plummer's pill, the decoction of dulcamara, &c. present other means of obtaining success.

On the subject of the Harrogate water, it may be proper to observe, that the custom of transmitting it in bottles to distant parts when the convenience of patients does not admit of their visiting the wells, renders it liable to some deterioration, if great care be not taken. "It loses its transparency when exposed for about two hours to the air, at first acquiring rather a green hue, and, after long standing, by transmitted light, a slight reddish colour. It gradually loses its sulphuretted taste, and then has the flavour of a strong solution of common salt. We found by experiment, that the sulphuretted hydro-

gen gas undergoes decomposition by exposure. The oxygen of the atmosphere unites with the hydrogen, and the sulphur is precipitated in a state of minute division, the precipitate being of a light ash colour. Hence the turbid appearance of the water. It is, however, extremely worthy of observation, that this water bottled at the spring, and immediately corked and sealed, retains its gas and all its virtues for a long time*."

When benefit is expected to be derived in Impetigo from the use of local applications, the latter, as before observed, ought never to be had recourse to in the form of ointments. Independent of the difficulty of applying medicinal remedies in this form, from the slowness with which they penetrate the scabs covering the diseased parts, it is impossible to avail ourselves efficiently at the same time of the sedative effects of cold, which, particularly in the local varieties of the disease, is of the greatest importance. I have had reason, moreover, often to suppose that greasy applications, even of the simplest kind, are productive of increased irritation.

The hydrocianic acid, a medicine which has lately grown into repute, and appeared in

* Scudamore on Mineral Waters, p. 92.

some instances to be of great value internally exhibited in the management of phthisical affections, is sometimes very efficacious in the more limited forms of Impetigo. When the diseased surface has been diligently cleared of the scabby secretions, a lotion formed of this fluid, diluted very largely, and to which a little alcohol has been added, is the best form of application; and pieces of linen wetted with it may be kept constantly applied*. In the present state of our knowledge respecting its power, however, it would, perhaps, not be safe to apply it to a whole limb, or to an extensively diseased surface on the trunk†. It is much more efficacious in subduing the marks of irritation which exist on and surrounding the diseased spot, than any other application which I know of, if care be taken to clear away the secretions, so as to admit it directly to the diseased surface; but if the latter point be not attended to, its superiority is not so distinctly marked. It sometimes

* ℞. Acid. hydrocyanic. ʒiij.
Aq. distill. ℥viiss.
Alcohol ℥ss. ft. lotio.

† In two cases of Impetigo of both legs, extending from the ancle to the knee in which it was employed, a considerable intermission of the pulse took place, which ceased on its being discontinued.

rapidly removes every vestige of the disease, but is often followed by unhealthy skin; in which case, when the patient begins to relax in its application, the disease is apt to return.

The grand and predominant features of Impetigo are extreme irritation and active inflammatory action, accompanied or followed by a proportionate degree of relaxation of the vessels of the part involved. The objects in view, therefore, should be, first, to diminish such irritation, and, secondly, to supply the loss of tone which the vessels have sustained. It is evident, that the common sedative applications are not possessed of these properties conjointly, and hence arises the temporary effect only by which they are followed. The desiderata evidently consist of means which will at once relieve the turgescence and irritation, and correct the relaxed state of the vessels alluded to. It is upon these principles that the sulphur vapour bath acts in removing the disease, and its powers in such cases are unquestionable.

A very common affection of an impetiginous character, confined to the cutis of the ears, and generally most violent on their posterior surfaces, prevails among females. In the milder cases, if it be not very minutely examined, an apparently abraded state of the

part, with much redness, and a slight fluid secretion, are noticed, and much itching and heat are usually complained of. If the surface is particularly examined, however, the cuticle will be found to have been partly removed by the formation of a number of minute vesicles, which have been broken down, and their contents discharged. In other cases, the small vesicles and pustules are distinctly seen very copiously distributed, but being covered by the delicate cuticle of the part, are ruptured by the slightest roughness.

This affection is exceedingly obstinate, and does not readily yield to any application or method of treatment. Constitutional remedies, whether tending to give energy, or to produce an opposite effect, are equally uncertain as to the benefits they may be expected to produce; the disease sometimes occurring in full habits, and at others, in those of an opposite character. Common sedative washes do little good, and the only applications which have, under my notice, brought about any permanently beneficial effect, are the black lotion and the prussic acid lotion before spoken of; and sometimes where the one or the other fail in effecting a cure, they may be made use of alternately with good hopes of success. Strong cathartics, such as

calomel and jalap exhibited twice a week, but not to the extent of materially reducing the strength, constitute the best part of the internal management; and as far as my observation goes, they are equally advantageous in thin and spare habits, or the opposite.

CHAPTER XIV.

OF SCABIES.

THE most common form in which Scabies makes its first appearance is that of minute vesicles, containing a transparent colourless fluid, intermixed with small papulæ, which, in a few hours, if suffered to remain undisturbed, assume the character of vesicles also. The attention is usually first directed to the part by the inordinate prevalence of the sensation from which the disease takes its name, which, leading to frequent friction and scratching, is soon followed by inflammation of the skin, and rupture of some of the vesicles, and, consequently, the fluid they contain possessing the power of infection, by the extension of the mischief to the surrounding parts.

In the lower classes of society the disease is rarely seen before it has been some time established, and has extended itself over most parts of the body. In such cases, it is most

virulent and troublesome in situations well covered by clothing, or subject to friction. The trunk, margins of the arm-pits, and flexures of the joints elsewhere, usually exhibit marks of the greatest irritation; while in more recent cases, in cleanly persons it is usually first detected about the fingers, wrists, and backs of the hands.

It is generally understood that this disease is in the majority of cases produced by the direct application of the contents of the vesicles from contact with an affected person, or by handling and making use of their clothes, sleeping in the same bed, &c. It is also generated by the neglect of personal cleanliness, and inattention to frequent changes of linen, and hence has been said to prevail much among the natives of cold and mountainous countries.

When it has been of long standing, and the skin of the patient is very irritable, it often exhibits at one view the appearance of pimples, vesicles, and pustules of different dimensions interspersed: a condition, which, together with the excessive itching and irritation, will enable us readily to distinguish it from any other disease. The degree of irritability of skin, indeed, seems very much to influence

the character the eruption assumes: where this property is particularly marked, rapidly running from the papular form to vesication, the vesicle in the course of a short time terminating in a change to opacity of its contents, and all the characters of a pustule of considerable size. Hence the vulgar distinction of watery and pocky itch, which, though it does not seem to be of much practical importance, has furnished the ground-work of Dr. Willan's division into five different species.

This disease seems to be totally unconnected at its origin with any constitutional cause; but when it occurs where the system is debilitated, or the habit unhealthy, it sometimes leaves a troublesome impetiginous affection on the skin of the parts, long after its specific character has been eradicated, a state which appears to answer to the description of S. cachectica.

The existence of an insect in some of the vesicles and pustules of itch has been discovered in repeated instances by the assistance of good glasses, and it is therefore supposed, with apparent good reason, that the disease is the mere result of their operations in the skin. On the other hand, however, it has been maintained, that such insects are the consequences rather than the cause of the dis-

ease, and that they are not found in the majority of cases where inquiry has been instituted. The first of these opinions prevailed very generally until the publication of Dr. Bateman's work, and he has expressed his suspicions that the insect is not to be found in all cases of the disease. He brings forward the authority of Dr. Heberden and of Baker and Canton, the two latter of whom had the advantage of great experience in the use of the microscope, in support of his opinion. Since Dr. Bateman's work was published, the subject has been several times canvassed by French pathologists; among whom, Lugol, Mourouval*, and Dr. Suriray, of Havre †, contend for the non-existence of the insect; while the experiments of Dr. Gales, the well known inventor of sulphur fumigations, seem quite conclusive in favour of the original opinion ‡. The three former have

* Nouvelles Recherches et Observations sur la Gale, faites à l'Hospital St. Louis, à la Clinique de M. Lugol, pendant les annees 1819, 1820, 1821, et recueillies par I. F. I. Mourouval. 1 vol. 8vo.

† Letter to Dr. Mark, Journal de Medecine, Aûg. 1813.

‡ The Acarus Scabiei is not a solitary instance of the domicile of animalculæ in the substance of the skin, and of consequent production of much irritation and disease. The

by no means adduced that weight of evidence which Dr. Gales' statement contains, and it is more than probable, that the superior opportunities of inquiry which the situation of the latter gave him would enable him to arrive nearer the truth.

The hospital of St. Louis, in which Dr. G. was a long time resident, constantly contains a large number of cases of itch: he states, that he has examined some hundreds of the insects in question; his description of which exactly corresponds with that given by Linnæus. He has succeeded in producing the disease by confining the insect on his own skin repeatedly; and his experiments have been witnessed by some of the most eminent medical characters in Paris, who have been satisfied with the manner in which he has conducted, and with the conclusions which he has drawn from them.

The differences of opinion on this point admit of ready explanation. A short time since, in the course of my inquiries, I had an opportunity of seeing great numbers of the

Furia infernalis of Siberia, the Chigre and the Dracunculus are analogous cases. Fatal effects have arisen from each of the three latter in a variety of instances.

insect readily extracted with finely pointed needles; not, however, from the centre of the vesicle or pustule, but from their sides. The situation of the insect in such circumstances is marked by a minute speck exterior to the margin of the vesicle; and with care it may be always extracted alive. In the situation in which it is detected, it is evidently making its escape, from the fluid which its operations have produced, and in which it would probably be unable to live. This conjecture is strengthened by the fact, that the greatest care does not enable us to find it in those vesicles which are of enlarged dimensions, or which have become opake. A justifiable inference may be drawn, therefore, that, when it has penetrated the cuticle, and obtained sufficient nourishment for its present wants, it proceeds to extricate itself from the spot, in search of a new field for its operations, leaving the irritation it has excited, to form an enlarged vesicle, which undergoes the regular change to an opake state, and ultimately the formation of a scab. It is fair to presume, that those who contend for the non-existence of the insect have been unfortunate enough to select the vesicles which it has evacuated for their researches, for,

indeed, every one would probably be induced to do so merely on account of their size and number.

I shall probably be able, in a short time, to furnish a very satisfactory and complete history of the acarus scabiei, having been some time occupied in the inquiry. The foregoing facts may be, in the mean time, fully relied on, as far as they are connected with the pathology of itch.

A great variety of applications have been made use of in the cure of itch, notwithstanding our knowledge of a decided specific. The unpleasantness of the smell of sulphur would render it very desirable to find a substitute for it, and many trials have been made, but hitherto without effect; the undermentioned * have, however, been found sometimes adequate to the removal of trifling cases of the disease; but there is no doubt that sulphur is the safest and most expeditious remedy.

The most common form in which it is employed in this country is that of ointment;

* Solutions of potash, muriate of ammonia, oxymuriate of mercury, arsenic; decoctions of hellebore, digitalis, and tobacco; sulphuric and oxygenated muriatic acid properly diluted, &c. &c.

but the recent importation of the French fumigating baths has afforded us some opportunities of avoiding the unpleasantness of this plan, and though somewhat more tedious in bringing about a cure, they are sometimes entitled to preference on account of the superior degree of cleanliness the patient is enabled to observe during the treatment.

The history of the sulphur vapour bath appears to have commenced with the experiments and researches of Dr. Gales, before referred to. The comparatively rude and unpleasant expedient of saturating blankets with the vapour, by means of a warming-pan, was first adopted, on the burning coals of which the sulphur was strewed when the vehicle was introduced into the bed, until the combustion was complete. The patient was then directed to enter it naked, and was covered up to the throat. Seven repetitions of this process in as many nights was found to be adequate to the cure; and it seems probable, that in very delicate habits, or in the cases of pregnant women, it is entitled to preference over the vapour-bath at present in use.

The vapour of the sulphur is unquestionably the agent by which the cure is brought about, and there seems as little doubt that

the destruction of the insect constitutes its *modus operandi.* Dr. Horn,* of Berlin, and Dr. de Carro, of Vienna, appear to have been next to Dr. Gales in the use of the bath. Subsequently to these, Mr. Wallace, of Dublin, has published his observations; and step by step, by the joint improvements or suggestions of the observers, the instrument, from having been inconvenient and uncomfortable to the patient, is now become not only an important and decided remedy of great value in many cutaneous diseases, but an absolute luxury as regards the patient's feelings.

The number of fumigations necessary to the cure of Scabies differs much, according to the virulence of the disease, the degree of irritability of the skin, &c.; but if the clothes of the patient be suspended in the bath during each application, which is always prudent in the cases of the lower class of people, the cure will be much expedited.

Besides the advantages of the bath already alluded to, it is never followed by that irritation of the skin, which long continued use of the ointment is often found to produce, and which has not unfrequently led to the continuance of the remedy long after the disease has been really subdued.

CHAPTER XV.

OF ECZEMA.

THE disease termed Eczema, as it is most frequently seen according with the general definition of Dr. Bateman, is the simple effect of the application of heat to the skin*. I am not aware that irritation applied in any other form is capable of producing an equally diffused eruption of vesicles, "with little or no inflammation round their bases;" though it is stated, on the authority alluded to, to be produced by a great variety of other irritants in persons whose skin is constitutionally very irritable.

Among the varieties as they have been termed of this disease, the most important is the E. rubrum, and it differs from the above definitions in having the vesicles much

* An eruption of small vesicles on various parts of the skin, usually set close, or crowded together with little or no inflammation round their bases. Bateman's Synopsis, p. 252.

closer set together, and their interstices of a bright inflammatory red colour, and also in being much more generally and extensively diffused.

In cases produced by the heat of the sun even, it should be remarked, that considerable tumefaction and heat of the parts accompanies or precedes the formation of vesicles; the definition alluded to would otherwise seem likely to lead to mistakes: it is, indeed, equally applicable to the appearances of some cases of itch, the tumefaction alluded to being at first sight the only mark of distinction.

This affection has obtained in its more formidable form, as produced by mercury, the attention of many experienced observers, from whose published remarks it appears, that though attended with much local irritation and a copious discharge from almost every part of the surface of the body, it is generally unattended with danger. It subsides according to the violence and extent of the eruption at its commencement, apparently uninfluenced by medicinal treatment in the space of from three weeks to two months.

The heat of the sun is, in delicate and irritable skins, capable of producing its more insignificant forms on the hands, neck, face, and other exposed parts in a very short period,

and, consequently, such forms prevail most among field labourers in the time of harvest. With the same state of skin, it may of course be produced by the application of heat in any other way.

It is generally, when occurring to a small extent, and from the operation of local causes, a distinctly vesicular disease; and in a day or two, if the part be defended from heat and irritation, it usually disappears. Now and then, however, when due attention has not been paid to it, a healthy state of parts does not so speedily follow; and after it has been a little time established, the new vesicles which form are of larger dimensions, and their contents become opake before they break, thereby giving the disease an affinity to Impetigo. When obviously produced by the heat of the sun, it has been named accordingly*; and when, from the circumstances mentioned, it approaches to Impetigo, it has received a distinguishing designation †; the understanding, however, that when occurring to a limited extent, and from the operation of local causes, its variations of character are so minute and unessential, will be sufficient to justify us in declining the use of

* E. solare. † E. impetiginodes. Bateman.

these terms altogether. From some experiments which I have instituted, I have no doubt that the minute vesicular form which the disease assumes, when occurring from exposure to the sun, is materially dependent on the degree of heat applied; that a blistered state of skin would occur if the heat was increased, while a minor degree of the latter would only be followed by erythematous redness; that it is therefore to be considered rather as an accidental injury, and treated on surgical principles, in a manner similar to a slight burn or scald, than to be spoken of as a disease. It is moreover a state of parts, which the abstraction of heat, by cooling sedative washes, even though the irritation may be great, will enable the efforts of nature to correct in a few hours.

The vesicular character of the disease, when it occurs on the backs of the hands and fingers from exposure to the sun, has been considered as approaching Scabies so nearly, as to be likely to lead to mistakes; and points in which dissimilitude exists have been stated by Dr. Bateman in the work so often alluded to. The patient is, however, generally too well aware of the cause, to require to be set right on this point; but should this not be the case, the swelling and heat attending the

eczematous eruption, with the absence of the characteristic itching of scabies, will enable us to form a correct opinion. In scabies, moreover, of any standing, the vesicles are larger and more irregular in their size, and intermixed with distinct pustules, and with the scabs which form on the bases of the latter which have been ruptured by scratching.

Like most other cutaneous diseases, the eczematous eruption, sometimes by long and repeated application of the exciting cause, becomes more permanent and established, and much less ready to yield to the applications mentioned. In this state the vessels of the part have become debilitated and relaxed by constant excitement, and the addition of a few grains of alum, or of the acetate or sulphate of zinc to the spirituous lotion, will be found necessary. This form of application is generally more useful in those cases which approach to the impetiginous character than any other. The use of ointments, or any other kind of greasy application, cannot be too much condemned.

When Eczema is produced by mercury, the patient is first made sensible of the approaching disorder by a feeling of burning heat, itching and tingling extending over

the greater part of the body, but more particularly severe in the flexures of the joints, on the inner surface of the thighs, in the groins, and about the pubes and axillæ. A considerable degree of roughness of the skin of these parts speedily follows, with a deep inflammatory redness, not at first unlike that of scarlatina. On the second day, the roughness is increased, and is easily observed to be produced by an immense number of minute vesicles, pretty regular in their size, and distributed closely and equally upon the parts particularly mentioned. On the third day, the more exposed parts are also covered in a like manner with vesicles, containing a transparent fluid, while those previously formed on the thighs, groin, &c. begin to turn opake and milky. On the fourth, many of these latter break, and the disordered surface is covered by a copious exudation of viscous fluid, having an unpleasant odour, with which the linen is speedily imbued and stiffened; the latter, in this state, adding to the unpleasantness of the situation of the patient, by further irritating the parts with which it comes in contact. On the fifth day, the cuticle desquamates in large patches over the greater part of the body; the inner surface of the thighs, as well as the groins,

scrotum, and margins of the axillæ, are quite raw, and covered with the same fluid. There is much pain attending every attempt to change the position, and the smarting is excessively severe on the groins and thighs, if the patient attempts to extend himself; the most easy position being that in which the knees are kept considerably elevated.

The only marks of constitutional derangement commonly distinguishable are a weak and quickened pulse, and a slightly furred tongue. The patient usually complains of weakness, but his appetite is not impaired. The bowels are regular, and the urinary secretion not much affected.

This state of things continues for many days, a succession of new vesicles continuing to appear wherever patches of unimpaired cuticle remain, till the greater part of the cutis has been denuded. In those situations which have been particularly noticed as favourable to the disease, the newly formed cuticle on the recently abraded and inflamed surface is soon elevated and destroyed by more minute and delicate vesicles, which are ruptured in a few hours after their formation, and spots where the disease appeared to have subsided are thus again found perfectly denuded, and pouring out the same discharge

as others. The protracted character which the disease assumes arises from these continued interruptions of the formation of new cuticle, and it not unfrequently happens, that this structure, in a new and delicate state, is destroyed and re-produced repeatedly, in the course of twenty-four hours.

As the disease begins to subside, the quantity of fluid secretion gradually diminishes: the latter, however, appears to mix with and half dissolve the ill-formed and delicate cuticle; and at this period, and under these circumstances, scales of considerable thickness, and fissures of corresponding depth, are produced, from the latter of which the discharge is kept up, while along their course much pain and irritation continues to be felt. Repeated exfoliations of this mixture of cuticle and diseased secretion continues, till as the inflammatory action subsides, the first is more perfectly formed, and obtains its original strength and flexibility.

It has already been stated, that the duration of this affection is uncertain. It may even, though occasioned by mercury, be very limited in extent, and cease in a few days; and I have not seen a case even occurring in the most plethoric and healthy states of system (and it is in such that it shows itself most

formidably) continue longer than five weeks, though the formation of solid unbroken cuticle may not be effected for a much longer period.

The foregoing description applies most particularly to the more formidable species of the disease produced by mercury. To a much more limited extent, and in a milder form, it is not unfrequently produced by opium, antimony, bals. copaibæ, &c.; in which instances, the contents of the vesicles rarely become opake, but are absorbed in a day or two, without rupturing the cuticle, being only followed by slight exfoliations of scurf.

Dr. M'Mullin* has divided the disease into three different stages. The first of these, however, consists of a train of constitutional symptoms by no means occurring in the majority of cases, and the Doctor himself observes, that "whilst the eruption is making its appearance in one place, another part may have arrived at its most advanced form, so that all the different stages may be present at one time in the same individual;" an observation which has been confirmed by all who have had opportunities of seeing the disease. The accompanying remarks, that it is attended with typhus

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* Ed. Med. and Surgical Journ. vol. ii.

through its entire course, and that it is the peculiar effect of mercury, have not been by any means confirmed by subsequent inquiry, as may be seen by referring to Dr. Rutter's* and Dr. Chisholm's† papers on this subject, as well as to Dr. Moriarty's Tract‡.

From the facts which have been recorded, it appears that it is only when the strength of the patient has been originally not very great, and when debility has been brought on by excessive discharge, that typhoid symptoms occur. Under these circumstances only is danger to be apprehended; and in such a state of things diarrhœa has occasionally come on, which has resisted every description of remedy, and ultimately destroyed life.

Sometimes, as observed by Dr. Rutter, a state of inflammation of the nares, trachea, and bronchiæ, form important features of the disease, which will of course add much to the danger of the case when combined with the debilitated condition described; this, however, is only of accidental occurrence, and does not, in a great majority of cases, rise

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* Med. and Physical Journal, vol. xxi., and Ed. Med. and Surg. vol. v.

† Ibid. vol. viii.

‡ A Description of Mercurial Lepra, 1804.

to such a height as to attract much attention.

A large proportion of the cases which have been recorded have occurred after the appearance of catarrhal symptoms, while the system was under the influence of mercury; and hence has arisen the opinion, that it is produced by taking cold under such circumstances: but, as it has been justly remarked by Dr. Spens, this accident is much too common to justify us in supposing that nothing else is necessary to the production of the disease, while the latter occurs in numerous instances where symptoms of catarrhal affection, or any other obvious disorder have not made their appearance. Such an opinion was, however, we are informed, held by Dr. Gregory, Dr. M'Mullin, and others, on the grounds above stated; but the weight of evidence adduced is directly in favour of the conjecture, that previous idiosyncrasy must have existed.

In the treatment of this disease it will now and then happen, that though the bowels may be sufficiently open, the state of tongue and secretions may make it desirable to have recourse to a mercurial alterative; or this medicine may require to be speedily renewed to meet the exigencies of the case, where the

patient is afflicted with syphilis. It would therefore be desirable to ascertain the propriety of this step, and probable risk attending it, of bringing back, and re-establishing the eczematous eruption. It appears to have been done in one or two instances without any mischief of this kind occurring; but in other cases, much aggravation of the inflammation, and fresh crops of vesicles have been immediately produced. So susceptible, indeed, is the constitution sometimes found, that the smallest portion of mercury exhibited internally was injurious; and in one instance recorded by Dr. Crawford*, even the application of ung. hydr. nitr. to a tender part was followed by a return of the disease with its original violence. On the whole, it would seem advisable to refrain from the use of mercury in any form, except under circumstances of the greatest emergency.

There is no evidence in the cases to which I have referred, as to the precise state of system under the influence of mercury, in which the attack has commenced, and it is probable, that in the greater number of instances, the eruption appears where no previous disorder of the system has been effected. That it does

* Ed. Med. and Sur. Journal, vol. xvi.

often occur simultaneously with catarrhal fever, is unquestionable, but it is a matter of doubt whether the latter may stand in the situation of cause or effect; for it may be just as reasonable to suppose that the catarrhal symptoms arise from the extension of the cutaneous inflammation constituting the disease along the membranes of the nares, trachea, and bronchiæ, as that these symptoms, with their accompanying fever, produce the eruption. In a case lately under my notice, the subject of which was a stout, muscular, healthy man, no trace of disorder existed at the period of the attack, and he went through a disease of two months' duration without the slightest appearance of any of the symptoms alluded to.

Dr. Bateman's plate 57 appears to bear a great similarity to some cases of the affection which I have noticed under the head of Impetigo*, and I have reason to think it is the same disease in a more aggravated form than usual. Neglect of cleanliness, or preternatural irritability of skin, are at all times fully adequate to the production of greater variations than between the plate in question and the description referred to.

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* See page 338. A very common affection, &c.

In the treatment of Eczema Mercuriale, sufficient attention does not appear to have been directed hitherto to the use of the warm bath. In the case described by Dr. Marcet*, it seems to have been efficacious, not only in allaying the irritability of the skin at the time, but in preventing so frequent a return of the disease as the patient had been previously subject to. At any period of the disease, this measure will be productive of much advantage, in lessening the irritation, and relieving the surface of its turgescence, in removing the fluid adhesive secretion, and making the patient infinitely more comfortable. If repeated twice a day, for three or four successive days, it has appeared to lessen the duration of the complaint very materially; the secretion on the surface being much reduced in extent, and the formation of healthy cuticle being thereby much earlier accomplished.

The occasional use of mild saline aperients, and confinement to an unirritating, but nutritive diet, with softly sponging the most tender parts occasionally with warm water, constitute all that is necessary or useful in the treatment of the disease, beyond the use of the bath. If the irritation is so great as to

* Med. Chir. Transactions, vol. ii.

disturb the patient's rest, the use of opiates may be necessary, and do not appear objectionable. When, at the termination of the disease, the state of system requires tonics, it is not of so much importance what kind may be employed; but if the strength is so much exhausted before the discharge has ceased as to require such medicines, those which are chosen should be of the simplest and most unirritating kind.

The discoloration of the skin which frequently exists in cases of Eczema from mercury for some time after recovery, has occasionally led to mistakes of an unpleasant nature in medical treatment. I have known it in two instances considered and treated as of a syphilitic character, and leading to a renewal of the use of mercury, by which the eruption has been reproduced. It is, however, quite unlike any other cutaneous affection, and the history of the case, if attentively inquired into, will generally be enough to guard us against such an occurrence.

SECTION V

CHAPTER XVI.

On diseases dependent on debilitated and deranged states of system, and consequent diminished tone of the vessels of the cutis.

UNDER this title I propose to consider the varieties of Purpura, and the cutaneous affection attendant on scurvy, or, in other words, the variations of constitutional condition under which actual rupture of the minute extremities of the vessels of the surface occurs—that state of relaxation in which the serous portions of the blood only escape, forming by its extravasation under the cuticle what has been termed bullæ or blebs—the diseases designated Ecthyma and Rupia, and Erythema nodosum.

The exclusion of the influence of the state of constitution in giving a character to cutaneous diseases, apparent in the attempts at

classification which have been made heretofore, has been much noticed, and objected to with good apparent reason, and hence but little surprise will be felt at my including under one head, diseases which form parts of no less than four different orders of preceding authors. The objection to the classification alluded to, that the particular state of constitution or derangement of important organs, on which the disease may depend, is omitted, appears to be well founded, because it is quite evident that no useful result can accrue in classing diseases according to their local characters, if the state of constitution on which they depend, and through which only any remedy can be conveyed, is overlooked. In the consideration of the diseases which form the subject of the present chapter, this observation applies with peculiar force, for the constitution is most certainly the medium through which any efficient remedial measure can be employed: local applications being rarely required or admissible.

The disease termed Purpura, in its more formidable shape, accompanied by a train of symptoms immediately threatening the existence of the patient, merits, and appears to have obtained, at various periods, the attention of some of the most distinguished cha-

racters in the history of medical literature; and the names of Parry, Bree, Buxton, Duncan, Harty, and others, are scattered through the volumes of the periodical press, in connexion with communications regarding it, not inferior in correct observation to their more distinguished works. It is a disease which, in its more important form, frequently paralyses the hand of the physician, and suspends in doubt and apprehension the decision of the most practised and fearless mind. Its distinguishing feature is, on the one hand, according to received notions, identified with the lowest degree of debility; on the other, it is ushered in with symptoms which cannot subsist many hours uncontrolled by active treatment, without the most imminent peril to internal organs. In one point of view, the probability exists of extinguishing life by extracting a few ounces of blood; in the other, such a measure appears a matter of absolute necessity.

To ascertain the causes of this apparent inconsistency of symptoms, and to reconcile it with a systematic line of treatment, seems at first sight a matter of much difficulty; and though the original opinion of the character of the complaint ought not to be impeached, merely because symptoms of apparent in-

flammation occur at times in conjunction with the cutaneous affection, yet it appears to be clear, that want of tone in the vessels of the surface is perfectly compatible with unimpaired strength of the system at large, and capable of being produced to such an extent as under the ordinary impetus of the circulation to admit of the rupture of such vessels; forming, in some cases, the Purpura Simplex, or Petechiæ sine febre; and in others, the more serious and formidable P. Hemorrhagica.

The best descriptions of the Purpura Simplex concur with each other in attributing it uniformly to a state of general debility; but it is nevertheless sometimes seen, as well as the P. Hemorrhagica, where such a state of system does not exist.

The appearance of the spots or Petechiæ is almost too well known to require description; they are "small, distinct, purple specks and patches" usually distributed over every part of the body. Although classed by Willan and Bateman in the order Exanthemata, this form of the disease is rarely attended with fever, though not unfrequently with manifest disorder of the digestive organs.

The small purple specks constituting the most simple forms of the disease may be

sometimes mistaken for flea-bites, which, in appearance, they very much resemble. On attentive examination, however, they are found to be unattended with inflammatory redness, and are consequently not raised above the surrounding surface. They are, moreover, distributed more extensively over the skin; and if febrile symptoms, or much disorder of the digestive organs exist, and particularly if vomiting has recently taken place, are dispersed very thickly over the face, neck, and superior parts of the body. Frequently two or three appear to join and run into each other, forming larger spots, which still, however, preserve their distinctive character, and are circumscribed.

The more formidable cases, namely, those where the cutaneous affection shows itself in the form of large purple coloured blotches on the surface, and with which a few of the specks above described are intermixed, claims the most important attention, and may be considered a seriously aggravated form of the disorder. In such cases the effusion does not appear to take place from two, three, or more minute vessels, but from a comparatively extensive space of the surface, the extravasated blood diffusing itself under the cuticle, and giving the appearance of contusion, the mar-

gins of the blotches being considerably lighter than the centre, and here and there assuming a yellow or greenish hue.

There is every reason to admit the truth of the position, that loss of tone in the vessels of the surface is requisite to admit of that rupture of their extremities and consequent extravasation necessary to the production of Petechiæ; and also that the cause of such loss of tone must have a constitutional origin. It is not true, however, that an obvious wasting of the solids and other symptoms of debility always precede it; or that deficiency either in the quantity or quality of the food taken, or that excess of laborious bodily or mental exertion, is necessary to its production. It unquestionably does occur under such circumstances, but it is also very frequently seen in persons who a day or two previous have been in apparent good health. It is usually accompanied with sensations of languor and lassitude, even in these; there is a furred yellow tongue and uneasiness in the head, nausea and constipation, and diminished appetite; a train of symptoms, in short, indicating the highest degree of derangement of the digestive organs. If this state of disorder exist, it has appeared to me not unfrequently, that the most robust and full habits

of body are more liable to Petechiæ, though appearing partially, than those of an opposite character, and I have been led to form this opinion from having witnessed several cases, of which the following may be taken as a specimen.

A young female usually enjoying pretty good health, of a robust habit of body, and florid healthy complexion, had complained for two or three days of nausea, constipation, uneasiness about the head, loss of appetite, &c.; with a view of removing which, she had, the day before I saw her, taken some aperient medicine. The latter not appearing to have given the expected relief, she, on the following morning, had recourse to an emetic of ipecacuanha: after a few efforts to vomit had been produced, the persons about her were alarmed by the sudden appearance of Petechiæ of very considerable size, distributed exceedingly thick over the whole of the face, neck, and shoulders, while the conjunctiva was almost entirely suffused with blood. Her complexion had been previously exceedingly clear, and the sudden and extraordinary change which the appearance of the disease effected excited the highest degree of alarm. Her pulse was at this time hard and quick, and she complained of deep seated pain in

the chest, with considerable oppression in breathing: having, however, seen other cases of a similar kind, where bleeding was dispensed with, and speedy relief effected by the use of cathartics, I depended entirely on the latter, making calomel an important part of what was exhibited. The offensiveness and pitchy colour of the evacuations, as well as the immense accumulation of undigested aliment which they contained, amply satisfied me that this was the best and most direct plan of treatment.

It has been maintained by some writers, and among others, I believe, by Dr. Mills, Dr. Parry, and Dr. Combe, that venous congestion is necessary to the production of Petechiæ. However true this may be in the Petechiæ of low fevers, it may be doubted as regards those occurring under symptoms of general debility, unaccompanied by fever, as well as those arising from disorder of the functions of the abdominal viscera, where fulness of system is not decidedly marked. It must be admitted, however, where the latter exists, as in the case above detailed, during the act of vomiting, that such congestion is, sometimes, at least, temporarily established, and precedes the appearance of the disease.

Purpura Simplex, or Petechiæ sine febre,

may be said to be *always* preceded, whether in debilitated or other constitutions, by some disorder of the digestive organs ; and in all the cases which I have had an opportunity of observing, where symptoms of such disorder were not plainly discernible, the state of the evacuations only, fully justified this opinion. I am inclined, therefore, in all cases where debility is present, to place this and the disorder mentioned, in the relation of predisposing and exciting causes of the disease. With respect to the treatment of simple Petechiæ, it is evident no harm can arise in commencing it by some alterative aperient, and this course is always entitled to the preference over one which rests solely on the exhibition of tonics. Purgatives will frequently remove every vestige of the disease without having recourse to tonic medicines at all ; but the same cannot be said of the latter, for it often produces a considerable increase of the number of spots and great febrile excitement : but of course it is not meant to be stated that the latter can be dispensed with with propriety, if symptoms of debility remain after the secretions have been restored to order. As medicines, bark and the acids seem to be entitled to the preference, where a tonic plan of treatment requires to be instituted.

The very correct description of Willan and Bateman of the P. Hemorrhagica discloses no points of dissimilarity between the latter and P. Simplex but such as constitute mere difference in degree both of the cutaneous affection and the constitutional symptoms. In P. Hemorrhagica, a few of the smaller Petechiæ are intermixed with large spots of extravasated blood, varying greatly in extent, according to the situation of the part, being largest, and often appearing first where the return of the blood to the heart is effected with the least facility, or where a greater degree of warmth is produced by the covering of the part, or other circumstances. The lower extremities affording instances of this, while the spots on the face and neck are proportionably less. From the same cause partly, so far as heat is concerned, and partly from the greater degree of delicacy of the cuticle in these situations, the inside of the cheeks and lips, the surface of the tongue, and membrane of the labiæ pudendi and vagina, frequently pour out dark-coloured blood in considerable quantities; while the motions are often discoloured by this fluid to an alarming extent. The slightest degree of pressure applied to the surface of the body appears to break down the relaxed and delicate veins of

the spot, and produces a mark of contusion considerably larger than what may be supposed to have been covered by the compressing substance which has been applied: even the pressure of the finger, as in feeling the pulse, has been found adequate to this effect. In examining the gums attentively, the edge in contact with the tooth sometimes appears to have lost here and there its florid complexion; to have become changed to a livid venous hue, and to have blood of the same colour oozing from it between the teeth. In some instances, the formation of vesicles of considerable size has been effected, containing extravasated blood, the quantity of the latter having been equal to the distension and elevation of the cuticle: an occurrence, for obvious reasons, more common on the membrane of the mouth and lips, than on other parts.

"The same state of the habit which gives rise to these effusions under the cuticle produces likewise copious discharges of blood, especially from the internal parts, which are defended by more delicate coverings. These hæmorrhages are often very profuse, and not easily restrained, and therefore sometimes prove suddenly fatal. But in other cases they are less copious; sometimes returning

every day at stated periods, and sometimes less frequently and at irregular intervals; and sometimes there is a slow and almost incessant oozing of blood. The bleeding occurs from the gums, nostrils, throat, inside of the cheeks, tongue, and lips, and sometimes from the lining membrane of the eyelids, the urethra, and the external ear; and also from the internal cavities of the lungs, stomach, bowels, uterus, kidneys, and bladder. There is the utmost variety, however, in different instances, as to the period of the disease, in which the hæmorrhages commence and cease, and as to the proportion which they bear to the cutaneous efflorescence.

"This singular disease is often preceded for some weeks by great lassitude, faintness, and pains in the limbs, which render the patients incapable of any exertion; but, not unfrequently, it appears suddenly in the midst of apparent good health. It is always accompanied with extreme debility and depression of spirits: the pulse is commonly feeble, and sometimes quickened; and heat, flushing, perspiration, and other symptoms of slight febrile irritation, recurring like the paroxysms of hectic, occasionally attend. In some patients, deep-seated pains have been felt about the præcordia, and in the chest, loins, or

abdomen ; and in others a considerable cough has accompanied the complaint, or a tumour and tension of the epigastrium and hypochondria, with tenderness on pressure, and a constipated or irregular state of bowels. But in many cases, no febrile appearances have been noticed ; and the functions of the intestines are often natural. In a few instances frequent syncope has occurred. When the disease has continued for some time, the patient becomes sallow, or of a dirty complexion, and much emaciated ; and some degree of œdema appears in the lower extremities, which afterwards extends to other parts."

The pains described in the foregoing passage from Dr. Bateman are noticed in almost every case recorded, both before and since the publication of the latter ; and an attentive perusal of the cases will also generally discover an intimate connexion between them, and high degree of disorder of the digestive organs : the evacuations, where they have been at all attended to, exhibiting proofs that the secretions have been for some time in so vitiated a state, as to be quite incompatible with generally healthy sensations to the patient, or with the due and efficient carrying

on of the processes of digestion, and consequent support to the system. In the cases recorded by Dr. Harty, of Dublin, Dr. Buxton, Mr. Rogerson, and others, to which I shall refer more explicitly hereafter, these facts were most particularly noticed, and were allowed to point out a line of treatment which was followed by the most gratifying results. It may be true that, in many cases, as stated in the preceding quotation, "no febrile appearances have been noticed, and that the functions of the intestines are often natural." The remark, however, does not apply satisfactorily to any which have come under my notice, nor are the cases on record, which I have been able to refer to, calculated to support such a statement.

Influenced by a consideration of the obscurity in which the pathology and treatment of the disease is involved, as well as by the great importance of the question as to its dependence on the same causes as scurvy, I have been induced to arrange the following table of ten reports, recorded at different periods within the last fifteen years. I have been anxious at one view to present a correct notice of the most prominent constitutional symptoms co-existent with the cutaneous

affection in the different cases, together with the plans of treatment adopted, and their various results.

The obvious similarity of the phenomena of Purpura in many essential points to that of scurvy leads us to the opinion of its being merely a modification of the latter, and the result of the treatment of a case detailed in the medical cases and observations of Dr. Duncan*, with that of another to which this author alludes in a following page, from the pen of Dr. Graaf, of Goetingen, go far to the establishment of such an opinion; and hence, probably, has arisen the occasional adoption of the term land scurvy. This view of the matter seems to have been very generally taken and acted upon up to the period of Dr. Willan's publication.

The ideas of the latter author, together with his rather unqualified recommendation of bark, wine, acids, and good living, seem to warrant the conclusion, that the cases which had chiefly come under his notice were similar to those above alluded to. Dr. Parry, however, in the paper noticed in the

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* Medical Cases selected from the Records of the Public Dispensary at Edinburgh, with Remarks and Observations by Andrew Duncan, M. D. F. R. and A. S. Ed. 1784.

annexed table, has adopted a different, or rather directly opposite opinion ; he considers the cases he has detailed as confirming his opinion that "in various diseases, among which may be reckoned inflammations, profluvia, hemorraghies, dropsies, exanthemata, and other cutaneous eruptions, and even the generality of nervous affections, there is one circumstance in common, which is *an over distension of certain blood-vessels*, arising probably from their relative want of tone, or the due contraction of their muscular fibres, and that the cases he has detailed were entitled to be denominated active hemorrhagies." It is to be observed, however, that no notice has been taken in their details of any hemorrhage from internal organs, exudation of blood from delicate membranes, or of deep-seated pains. The state of the stomach, bowels, and secretions, are also omitted, the tongue only being noticed as a little furred, so that it must be admitted that this was a case of the mildest and most insignificant form, and not constituting evidence of much weight in the question.

With reference to the cases detailed by Dr. Bree, it would appear that the conjoint influence of bleeding and purgatives rescued the patients from apoplexy and paralysis, as

well as the disease under consideration. In every instance, however, the simple detail of the facts affords abundant evidence, that most essential benefit was derived from the use of purgatives, though the character of the evacuations is not noticed by the author, and, notwithstanding the opinion he has given, that "Purpura may arise from compression of the brain giving occasion to the want of a contractile power in the fibres of the extreme vessels," we cannot, with due regard to that rigid examination of evidence necessary to lead us to correct ideas on a subject of so much importance, fail to observe, that in the first case, Petechiæ had shown themselves three weeks before "a debility of the whole system had increased, so as to bear the character of paralytic weakness;" or that in the second, intended to be explanatory of the theory of the cause of Purpura above quoted, the patient had been several times affected with slight symptoms of paralysis, which had *given way to purges of calomel; that she had been oppressed with bile, and relieved by copious discharges from the bowels in the early part of her complaint;* or that, although this state may have been followed by confusion of the head and affection of the organs of speech, *accompanied by diarrhœa,* reasonable doubt

may be entertained that that diarrhœa, even though it may have been relieved by bleeding, depended on the same state of vessels on the surface of the bowels, or internal organs, as that which admitted of actual extravasation of blood on the surface of the body: not that we mean to question the possibility of relaxation of the vessels of the mucous surface of the bowels or elsewhere, as produced by oppression of the brain, but simply to observe, that something more than mere relaxation is necessary to admit of that actual extravasation of blood on which Purpura is well known to depend; and that it appears probable that the apoplectic state of Dr. B.'s patients depended on the same cause as the petechial spots; namely, a high degree of disorder of the digestive organs. The absence of any notice, however, of the state of tongue, or character of the secretions, leaves us much to wish for in the shape of evidence.

Dr. Harty's communications are of a different character from the preceding, and when added to the evidence produced in the cases which follow them regarding the uniform efficacy of purgative medicines, and the character of the evacuations, amount almost to proofs that this formidable disease, whatever may have been the predisposing causes, is

immediately brought about by obstruction in the hepatic circulation, and consequent impediment to the functions of the stomach and alimentary canal. In no instance does it appear out of the whole recorded, where any attention to the state of the evacuations was paid, that the latter did not exhibit the most unequivocal proofs of congestion in the liver, and highly disordered biliary secretion, such as have been noticed by Dr. Harty. As the abbreviated manner in which the details of Dr. H.'s cases have been worded enables me to give them at length, their sterling worth and great importance in the question under discussion renders it an imperative duty on me so to do.

"Case 1. The subject, an unmarried female servant, about thirty years of age, rather corpulent; having, till of late, enjoyed apparent good health. Indigestion and a gnawing pain at the pit of her stomach constituted her chief complaints when I first saw her. In about three weeks petechiæ appeared, soon followed by slight and occasional hæmorrhage. The case, both in its commencement and progress, so closely resembled the very accurate description of purpura hæmorrhagica given by Dr. Willan in his reports, p. 90, that I need

not detain you by a long detail of symptoms. Entertaining a high and well-merited respect for Dr. Willan's authority, I strictly followed his mode of treatment. The kindness of friends liberally supplied her with nourishing diet and tonics; and, with the advantages of country air, I have reason to believe that all my injunctions were fairly complied with. In vain;—the hæmorrhage became daily more and more profuse and difficult of suppression. After suffering immense losses of blood, from every organ successively, she gradually sunk under the struggle. The fifth month terminated her sufferings. I was refused permission to examine the body after death; a refusal I have not yet ceased to regret.

"Case 2. The subject, a delicate woman, about the same age, worn down by frequent parturition, poor diet, bad air, deficient clothing, want of cleanliness, and confinement to a cold, damp ground floor. The disease set in with a severe attack of cholera: in two days after, petechiæ appeared, quickly followed by hæmorrhage from the mouth, nose, and stomach. Convinced of the inefficacy of mere tonics in bad cases, and forcibly impressed by the occurrence of cholera previous to the appearance of petechiæ, and by a

recollection of the *remarkable pain in the epigastric region*, which so generally precedes them, I determined, in this case, to direct my whole attention to the state of the abdominal viscera, and accordingly prescribed a brisk purgative of calomel. From the good effect of the first, I directed its repetition for a few successive nights. To my surprise, the hæmorrhage soon ceased, the spots rapidly disappeared, and in less than ten days the patient recovered, under every possible disadvantage of constitution, of air, and of diet. Encouraged by the unexpected result of this unpromising case, I now no longer hesitated in employing purgatives, and trusting to them only in both species of the complaint.

"Case 3. A boy about three years old, on whose face and body large purple spots appeared, when three weeks convalescent from scarlatina. There was occasional, though not profuse, hæmorrhage from the nose, gums, and fauces. Calomel and jalap were liberally administered for four successive nights. The fæces were black like pitch, and highly offensive. After each purgative there was evident improvement. The fæces assumed a more healthy appearance; and, by the sixth day, a single spot was not to be traced on the

whole body. These are the only cases of purpura hæmorrhagica that have fallen under my care. Of the purpura simplex, I have seen about ten cases, all of which readily yielded to the same plan. The most obstinate case was that of a girl of eleven years, on whom the petechiæ appeared without any previous illness, if we except a slight degree of languor and heaviness. The spots were more numerous, and more generally diffused than I have witnessed in any other instance; in two days they had reached their acmé, and were then accompanied by head-ache, quick pulse, and foul tongue (the only case in which I had seen fever present). It was necessary to purge this patient to a greater extent, and to employ much stronger doses than usual, to effect that purpose. The purgatives were continued for eight successive days, at the expiration of which period every symptom of disease had disappeared; and, without the aid of other medicines, the patient was restored to better health than she had hitherto enjoyed. All the cases of purpura simplex were under fifteen years of age, and all among the children of the poor. In some, the eruption had continued three or four weeks before purgatives were tried; and, in all, the stools were dark-coloured, though

not so black as in purpura hæmorrhagica. From my own experience, I can add nothing further on this subject; but I can state, that, having made an early communication to the other physicians at the Dispensary, the practice was adopted by some of them with a success equally marked and rapid. One of them (now no more) employed calomel only. A physician, attached to another Dispensary, informed me of his having successfully employed purgatives in one case, attended with enlarged abdomen, and complaints of pain in it,—circumstances which led to the use of that remedy."

In the first of Mr. Rogerson's cases, nothing was observable in the constitution of the patient which could lead to a supposition that mere debility of system was the sole cause of the disease; if that had been the case, indeed, the result would have proved the fallacy of the opinion, as recovery took place without measures of a tonic kind having been had recourse to; the pain in the head, oppression at the stomach, nausea, and colour of the tongue, together with the constipated state of bowels, were sufficient indications of disorder in the functions alluded to to lead to the exhibition of purgatives, from the

action of which the relief was so immediate, "that even her attendants were convinced of their utility." Cold ablutions were resorted to in both the cases which he details, with apparently good effect; but the rapid disappearance of the whole of the threatening symptoms from the time the bowels were freely opened, leaves little doubt that the life of the patient was saved entirely by the adoption of measures leading to this object. In the second case, no ground exists for believing that the abstraction of blood at all contributed to the recovery of the patient; nor is any notice of a beneficial change following it alluded to by the writer. As in the former, improvement rapidly went on after the powders (calomel and jalap) "had operated freely, and produced many stools of a dark colour, and intolerably offensive;" nor was any idea of the necessity of tonics to the cure suffered to suggest the use of even a little porter and animal food, till the petechiæ and all other symptoms had entirely disappeared. In both cases, the most dangerous set of symptoms had established themselves; the sudden recovery from which, after the operation of purgatives, does not appear to admit of explanation, except by referring them directly to congestion and disorder of the

liver, stomach, &c. Indeed the character of the secretions merely is sufficient to establish that fact.

Dr. Buxton's case, as will be seen by reference to the table, approaches very nearly in the chief distinguishing features of the disease to those of Dr. Harty and Mr. Rogerson. The same beneficial effect followed the use of brisk purgatives, and the evacuations were of a dark olive green colour: a colour, according to Dr. B'.s impression, not dependent on any mixture of blood with the secretions. Two important facts worthy of observation in this case are, that the tongue was tolerably clean, and the bowels regular. The absence of symptoms of such importance in the indication of disorder of the digestive organs might have led to a different practice from that adopted, had not the appearance of the complexion led to the suspicion of the truth.

The use of calomel and jalap is as unequivocally followed by rapid improvement in the case recorded by the Editors of the Medical Repository, as in the foregoing; and the same doubt seems to hang over the point as regards the benefit or necessity of bleeding, as in the last case of Mr. Rogerson: the

evacuations here also were of a dark green colour, and copious.

The next in succession are those of Dr. Nicoll, whose experience of the utility of the oil of turpentine in a variety of other affections has led him to submit it to trial in that before us. When the patient first-mentioned came under the doctor's notice, he had been well purged by the directions of another medical man previously in attendance. This discipline was ordered to be repeated by means of calomel and jalap, and on the following day he began to take the turpentine, night and morning, and rapidly recovered. The second case is precisely similar to the first in all essential points: no notice is taken of the character of the evacuations, except during the recovery of the second patient, when they are stated to have become natural. Nor is the *modus operandi* of the turpentine either theoretically or practically alluded to, and we are left to conjecture whether it is to its stimulant, diuretic, or cathartic properties that we are to consider ourselves indebted for the cure. In the first case, a great part of the object seems to have been accomplished, if our ideas, which the preceding cases have suggested, are cor-

rect, before the turpentine was employed; it is to be supposed, however, that the latter kept up the purgative action of the bowels in both cases.

In the very violent and speedily fatal case given by Dr. G. Johnson, *no passage through the bowels had taken place for a week previous to the first visit of this gentleman to the patient;* and the symptoms probably were rendered the more violent on this account. Injections, large doses of the pil. colocynth comp., and of calomel and jalap, produced no effect on the bowels of the patient, and fourteen ounces of blood taken from the arm was followed only by temporary relief. *The patient died without having had the bowels excited.* The blood drawn exhibited only slight traces of coagulable lymph; nor did the *post mortem* examination lead to any discovery of the products of inflammation in any internal organ. The petechiæ were distributed over the heart, stomach, and other viscera in great abundance.

Dr. Duncan, jun. has added to the case last mentioned in the Ed. Med. and Surgical Journal, one which he himself treated some time previous, by referring to the abstract of which in the table, a similar striking disappointment in the expectation of permanent

benefit from bleeding will be noticed. This operation appears to have been had recourse to on Dr. D's patient, in consequence of its having been apparently beneficial in the cases of Dr. Parry, and to have been repeated on the supposition that the "return of the hæmorrhage was from the impulse, *à posteriori*, being greater than the tender state of the vessels could bear." It appears more than probable that this last abstraction of blood was very prejudicial, it having been followed by great prostration of strength at a period when a great demand for the latter was made on the constitution of the patient, for the purposes of bringing on a healthy state of parts after a gangrenous slough in the throat. The effect of purgatives, whenever employed, was the production of black and fetid dejections, the character of which never changed for the better after the first appearance of the spots and hæmorrhage.

The case more recently detailed by Mr. Pretty is remarkable on many accounts. Before the Petechiæ appeared, the tongue was furred, there was pain in the epigastrium, and sickness, and the bowels had not been opened for two days, when several evacuations were produced by purgatives, which however did not relieve the pain, though they appeared

to have abated the sickness. The breathing became more frequent, the pulse harder, and the fever increased; when bleeding was had recourse to, and nitrate of potash with antimonial powder prescribed. The next day, symptoms of formidable congestion about the chest and head had taken place, *but the bowels were free*. The Petechiæ had increased, but the symptoms of congestion appeared to call for a repetition of bleeding, which was performed to the extent of 10 or 12 ounces, and followed by syncope and temporary relief: again the fever and bad symptoms returned, and the mineral acids were had recourse to, under the direction of Dr. Johnson: death, however, took place, preceded by the symptoms of the last stage of pulmonic inflammation. A part of the blood drawn at the second bleeding only, exhibited a buffy surface. The *post mortem* examination disclosed no vestige of recent active inflammation of any internal organ, but merely the appearances of congestion. It is much to be regretted, and this remark is made without the slightest intention to condemn any part of the proceedings in this case, that the state of the secretions had not been more fully noticed, and the use of purgatives carried to a greater extent; for the hepatic congestion and stomach

disorder indicated by pain in epigastrio, sickness, constipation, and furred tongue, which ushered in the disease, may be, in this as in other cases, justifiably considered in the situation of an exciting cause to all the subsequent commotion and mischief which occurred.

Dr. Duncan concludes the recital of his patient's case, by observing, that the possible modes in which he can conceive this disease to arise, are

1. Increased tenuity of blood, allowing it to escape from the superficial extremities of the minute arteries.

2. Dilatation of the mouths of these arteries allowing natural blood to escape.

3. Tenderness of the coats of the minute vessels giving way from the ordinary impetus of the blood.

4. Increased impetus of the blood rupturing healthy vessels.

5. Obstruction in the vessels causing rupture, with natural impetus, and without increased tenderness.

6. Two or more of these causes may act simultaneously or successively.

Most of these points have undergone much learned disquisition and theoretical argument with relation to scurvy and other diseases. The third idea of Dr. Duncan above

quoted is unquestionably correct as regards the formation of the cutaneous spots of Purpura. That this tenderness is the result of deficient nourishment in the superficial vessels, is perhaps equally clear; and it may fairly be suspected that such deficiency is consequent on the congestion in the hepatic and gastric circulation.

On a review of the foregoing cases, it will be observed, 1st. That a striking uniformity of symptoms indicating hepatic congestion and general disorder of the digestive organs; of those organs, on the proper performance of the functions of which, the formation of blood capable of conveying nourishment and the materials of growth to distant parts of the body chiefly depends; occurs in all of serious importance. 2nd. That these symptoms, consisting of constipation, dyspepsia, oppression of the chest, pain and tenderness in epigastrio, head-ache, &c. have been pretty clearly ascertained, both by the state of pulse during life, and by examination of these organs after death, as well as by the absence of important marks of inflammation in the blood drawn by venesection, and also by the effects of blood letting, not to depend on a state of actual inflammation. 3rd. That the constant effect of purgatives in dislodging vitiated secretions,

consisting chiefly, apparently, of accumulations of black biliary matter, has been pretty uniformly followed by the most strikingly beneficial change in the symptoms, while recovery took place in no instance without free purging.

The effects of remedies exhibited on principles founded on particular theories are usually tolerably correct tests of the truth of such theory; and though instances often enough occur where the constitution bears up against both disease, and medicines given under incorrect and dangerous notions of disease, or what is as bad, given without any knowledge or care about the matter; yet such instances may be considered only as exceptions to a general rule. It is only necessary after this remark to direct the reader's attention to the comparative good or evil of blood-letting—of the opposite system of tonics, —and the use of purgatives, as exhibited in the table, taking due notice of the cases which have been extracted from Dr. Harty's paper.

The direct cause of P. Hemorrhagica does not appear in any case of which I have been able to discover the records, or which have come under my observation, to depend on debility of system merely. Privation of food had not been experienced to any consider-

able extent in any of those immediately before us, and it may be doubtful whether a certain degree of energy of circulation may not be requisite to cause the escape of so much blood as is necessary to produce the enlarged blotches on the surface of this disease, and to explain the profuseness of the hæmorrhage from surfaces covered with more delicate membranes. The chief questions for decision seem to be, whether any thing like energy of circulation is consistent with that degree of debility and relaxation of the vessels of the skin where the tenderness of their coats disqualify them to resist the common force of the circulation; and if it be, upon what circumstances can the latter depend. Is the highest degree of hepatic and general visceral congestion and obstruction in the abdomen with which we are acquainted capable of so impeding the functions of digestion and chylification, as to become a cause of such reduction in the nutrient properties of the blood, as to render this fluid unequal to the efficient nourishment of every part of the system? If it is, in what parts of that system would the debility consequent thereon be first manifested?

With respect to the first of these questions, if a positive answer cannot be readily given in

the affirmative, it is at least to be considered not improbable. For the second, it will occur to us, that parts already built up by the previous healthy action of vessels, and not dependent on the latter every hour for their vitality; parts in a state of quietude and rest are not those in which such debility would be expected first to appear. The vessels themselves, in ceaseless action, and constantly under the influence of a distending power, would, reasoning on common principles, of necessity, be the first to suffer. The *vasa vasorum* supply the coats of the vessels themselves no better than the latter supply other parts, and these, therefore, being called on to make greater efforts in resisting the impulse of the circulation, first disclose the general deficiency by the rupture of their extremities.

The occasional temporary relief to the hurried and laborious breathing and pain in the chest experienced from bleeding rather confirms than opposes this view of the case, necessarily followed, as the operation must be, by diminution of the congestion in the lungs, which these symptoms denote, and which may be fairly concluded to be the consequence of impeded circulation in the liver.

Another case equally instructive on these

points is recorded by Dr. Bateman*, in which the decided superiority of evacuating remedies, and the danger of bleeding, are both strikingly exemplified †.

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* Ed. Med. and Surgical Journal, vol. ix.

† Since the publication of the first edition of this work, many cases of the disease under consideration have been published in the periodical journals, which tend to confirm the view which has been taken of it. The evidence furnished by the cases particularly set forth in the table appears to me more than sufficient to establish sound views of its pathology; were it otherwise, it would not be difficult to furnish much more, of which the following case may be considered a specimen :—

A youth about ten years of age was attacked in the summer of last year with a considerable degree of fever, accompanied by the eruption of Purpura, the large purple patches of the disease being mixed with petechiæ, and distributed over every part of the body, particularly the lower extremities. Great difficulty of breathing, a rapid and very hard pulse, severe head-ache and pain in epigastrio, accompanied by much tenderness on pressure. He had been previously occasionally subject to great irregularity of the action of the bowels, accompanied by febrile disorder, restless nights, loss of appetite, and great disposition to drowsiness, which usually yielded to calomel and active cathartics without much trouble, the bowels at such periods evincing proofs of having been some time much overloaded, and the evacuations being exceedingly offensive.

The bowels at the period of this attack were supposed to have been regular, but it was evident, on examination of the abdomen, that they were in a loaded state. The case was one which would, on a superficial view of it, appear to

There are two other species of Purpura described by Dr. Willan, the P. Urticans and

have called loudly for immediate venesection, and the pain alluded to, with the state of the pulse, &c., would, under other circumstances than their accompaniment by the eruption, have been thought to denote a serious degree of inflammatory action. The stomach was extremely irritable; and rejected the smallest portions of liquid.

The day after the appearance of the purple spots and petechiæ on the skin the gums began to bleed; hemorrhage also took place from the nose to a considerable extent, and blood passed from the bowels.

The state of the stomach precluded a possibility of employing any fluid medicine, and six grains of compound extract of colocynth, with two of calomel, were given in the form of pills every three hours. This dose was four times repeated before the bowels began to act; at the end of this time a copious evacuation of horribly offensive secretions, having but little appearance of feculent matter, took place. This was soon followed by others of the same nature, to the speedy relief of the patient from the pain and other severe symptoms.

The two following days were spent in the exhibition of the same purgative at more distant intervals, and the occasional use of a little chicken broth by way of sustenance, the stomach after the first evacuation having become considerably less irritable.

At the end of ten days the secretions had become tolerably healthy, the purple spots had nearly disappeared, the sites of some of the larger being only occupied by yellowish discolorations, similar to what take place after contusions.

He was at this period removed into the country, but in a few days relapsed, no doubt in consequence of some over-

P. Contagiosa. The P. Contagiosa is merely the Petechiæ of low fevers.

The purpura urticans, as its name implies, is somewhat allied to nettle rash. It seems to be chiefly, if not entirely, confined to the poorer classes of children, between the ages of four and fourteen; and cases of it are not uncommon among the patients of the Metropolitan Infirmary for Children.

If this form of the disease be seen at its commencement, it will be found much more to resemble urticaria than common purpura. It usually appears, indeed, as urticaria accom-

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sight either in what he had taken as food, or from the bowels not having been kept sufficiently open. He here had the misfortune to have a different view taken of his case, and the antiscorbutic plan put in full operation upon him. Calomel purgatives, which had been formerly found effectual, were suggested by his parents; but his medical adviser unfortunately considered them to have been the chief causes of his present disease. All his symptoms daily became aggravated under the employment of tonics, and his situation was one of serious peril.

The free use of the same purgative was ultimately had recourse to, and he gradually improved: he became anasarcous, however, to a monstrous extent, and remained for some time afterwards extremely delicate.

He has had several threatenings of other attacks, but the symptoms invariably yield to the free use of calomel and active purgatives.

panied with fever, the purple hue of the spots not taking place for many hours after the attack. It is generally of a distinctly intermittent nature, or more properly speaking, the febrile symptoms by which the rash is ushered in continue only for a few hours, and return every day, or every other day, with tolerable regularity, most frequently in the evening.

A slight degree of chilliness is first complained of; this is soon followed by heat and fever, and then the wheals and spots of nettle rash rapidly come out, accompanied by the usual feelings of heat, tingling, itching, &c. These sensations end with the febrile excitement, the white and red wheals subside, and the spots which they occupied become in the course of a few hours of a dark purple hue, a few petechiæ being generally interspersed, and both disappear very slowly. When the febrile symptoms return, a fresh formation of the white wheals and spots accompanies it, and when it subsides, these also become blue; and thus by repeated attacks the whole body is sometimes nearly covered. In the absence of fever there is no itching or tingling; and *the case, as regards the local characters of the disease, is one of purpura.* It is very rarely,

however, accompanied by hemorrhage from the lining membranes, as in common cases of this disease.

The treatment most successful, and which is indeed always adequate to the cure, consists first of the free use of calomel purgatives, and secondly, of the sulphate of quinine in the manner in which it is employed in common ague.

The latter medicine may generally be depended on for the prevention of a second attack, if the secretions have been previously rendered healthy by a proper use of purgatives.

The question as to the identity of Purpura with the common scurvy appears, on account of the support it has derived from the authority of Dr. Willan, to require some notice in this part of our subject. On a first view of the cases which I have selected to enable the reader to form his opinion of Purpura, it would appear that, except as regards the cutaneous affection, but little resemblance existed.

Whatever may have been the particular theories of individuals as to its causes on board ship; whether putridity, in any thing like the literal sense of the word, may really

be capable of existence in the living body, as supposed by Pringle; whether simple debility from privation of nourishment, according to Drs. Lind, Blane, and Milman, or privation of oxygen, according to the theories of Trotter, Goodwin, Beddoes, and others, may appear to have had the power of inducing scurvy; yet it must be remembered that this disease has always been most distressing in cold weather, even when the circumstances by which any of such states may be brought about were much less in action than when the ship in which it has made its appearance has been much longer out, if arrived or cruising in warmer latitudes: a fact, which is of serious importance in the investigation of the pathology of scurvy, and one which every surgeon of an East Indiaman, making a tedious voyage to India, may have opportunities of observing, sometimes on a large scale.

The very trivial forms, however, in which the disposition to scurvy makes its appearance in well-regulated ships at the present day scarcely enables us to identify it with the formidable disease described by the authors alluded to; but on such voyages as those named, sufficient opportunities sometimes occur to show that the minor degree of

nourishment contained in salt provisions ought only to be considered in the light of a predisposing cause.

On such voyages, where the provisions have not been carefully selected, a period of seven weeks or two months at sea, about which time the ship arrives off the Cape of Good Hope, brings generally a few cases of scurvy on the sick list. Stiffness of the hams and legs, languor, debility, purple spots, and a vesication or two, usually about the knees, with uneasiness at the pit of the stomach, bleeding of the gums, a doughy thickening of the skin and integuments of the lower extremities, and constipation, are, however, the only symptoms noticed; and as the ship approaches the termination of her voyage, these usually disappear. It should be observed, that limejuice is always furnished on board the ships in question; but this is not sufficient to protect the crews from the slight attacks described.

The facts that the cutaneous affection is accompanied by the same symptoms of hepatic congestion, *i. e.* uneasiness in the epigastrium, constipation, and languor, which usher in the phenomena Purpura; that it importantly resembles, in its essential characters, the spots of the latter, and that like it, it rapidly disappears, if an increased flow of perspiration

and healthy biliary secretion be induced, are quite sufficient to establish an intimate analogy between them; and while these favourable changes continue to take place on board ship on the approach to warmer latitudes, where no variation in the diet or circumstances of the patient can in other respects have taken place, it is fair to presume that, as in Purpura, the direct exciting cause must be hepatic congestion and deranged intestinal function.

It has long been matter of notoriety, that the employment of limejuice is not to be depended on as a preventive of scurvy, notwithstanding its former high character; and but little opportunity of observation is now necessary to show, that its good effects depend less on its antiseptic properties, than its power of exciting that gentle and healthy action of the bowels, which is the effect of most vegetable productions which are used as food.

It need not be observed that the use of meat which has been long salted, and consequently suffered a material diminution of its succulent and nutritious properties, is more speedily followed by scurvy than that which has been recently prepared; but it is also a fact, that the disposition to constipation is most

marked and obstinate in such cases, long before other symptoms of disease make their appearance*.

The light which has been lately thrown over the pathology of dysentery by Dr. Johnson†, Mr. Bampfield‡, and others, enables us to see a considerable similarity between this disease and scurvy, hepatic obstruction and deranged biliary secretions alike distinguishing both; and it may not be improbable, that in some cases the inflammatory symptoms of dysentery supersede those of scurvy, only because a greater degree of susceptibility to

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* In the season of 1815 and 1816 these remarks were exemplified in the cases of two Indiamen, with troops on board for Calcutta. By some mistake, part of the beef and pork had consisted of old naval stores unfit for such a voyage. The cases of scurvy, while the men were fed with these, became alarmingly numerous and severe; and the commander of one, after expending the whole of his live stock in remedying the mischief, thought it unsafe, from want of hands, to attempt the passage round the Cape of Good Hope. In the other the mischief was less extensive; but constipation, hepatic congestion, and black evacuations were usually observed in many instances, followed by dysentery of a severe character. Two fatal cases of the latter occurred within a short time of each other.

† On the Influence of Tropical Climates on European Constitutions.

‡ On Tropical and Scorbutic Dysentery.

irritating causes exists in the constitution of the patients. Thus an additional link is added to the chain of effects which leads us from the common dyspeptic sensations of every day's experience, down to formidable and destructive disease.

It has been already stated, that the cutaneous affections of scurvy, as the disease occurs at the present day, are a thickened and hardened state of the skin of the lower extremities, with dark-coloured blotches, and frequently the formation of a bulla containing bloody serum. The situation of the latter is usually about the knee, and I have been induced to think it generally produced by kneeling, or by some slight contusion against the rigging in going aloft. The cuticle of the vesicle is generally broken when it first comes under the eye of the surgeon, and part only of its contents remains. Its striking similarity to the Pompholyx, together with the fact that the latter is often intermixed with petechiæ, and originating in debilitated habits, establishes the opinion as to their dependence on states of the constitution somewhat similar.

It is not difficult to conceive that a degree of relaxation in the vessels of the cutis, somewhat less than that which renders the mere

impulse of the circulation equal to their rupture, as in petechiæ and vibices, will admit of the escape of the serous portions of the blood only under the cuticle; and this appears to be the manner in which both the vesicle of Scurvy and the common Pompholyx originate. In the former, however, blood to some extent always escapes, and is mixed with the serum, giving it the appearance of bloody-water.

The thickened appearance of the skin is, I believe, rather the conjoint effect of an interruption of the action of the absorbents of the part, with a slight escape of serum from minute vessels of the cellular membrane. Neither of these affections admit of any alleviation, except through the medium of the constitution.

CHAPTER XVII.

OF APHTHA, OR THRUSH.

In justice to Dr. Bateman, it is proper to observe, that on the subject of the above affection but little has been recorded by ancient, or discovered by modern writers, which has not been duly noticed in his Synopsis. It is a disease, as occurring among infants, usually of trivial importance, and rarely capable, in its most aggravated forms, except where extreme debility has been induced, of producing any seriously bad effects.

Infants of all classes seem to be more or less subject to it; but it occurs much more frequently where deviations from the natural and proper manner of feeding have been observed, it being more common, as well as more violent, in children who have not been properly suckled, than in those who are supported entirely by the mother's milk. Even in the latter case, however, it sometimes occurs, and is then usually supposed to depend on some derangement of the health of the mother.

It is usually spoken of as a distinctly vesicular disease, as formed of "whitish or pearl-coloured vesicles appearing on the tongue, lips, and interior surface of the mouth and throat;" though its analogy, at its commencement, to the pimples of Strophulus has been suspected, and alluded to by one or two preceding writers. I have never been able to see this disease in the mouth of the infant in the form of distinct vesicles, and am inclined to think that the appearances which have given rise to this idea of its character depend entirely on the peculiarities of the part, and that each white speck, constituting part of the disease, is produced as the pimples of Strophulus are, by a minute effusion of lymph under the delicate cuticle of the part. The peculiar delicacy of the latter in the infant, and the state of constant moisture and friction in which the tongue and other parts covered by the membranes of the mouth are kept in the infant, will readily explain why the substance of the pimple should be so soon disturbed and rubbed off, leaving that minute circle, or irregular and partly detached white crust of cuticle which distinguish the affection.

If the opinion of the vesicular character of

Thrush were correct, the disease would appear to be somewhat analogous to Herpes; but as far as we are able to judge, there is by no means equal derangement of the system acting as a cause, nor any thing like the same degree of pain and irritation attending it in its course; nor does it ever happen that herpetic vesicles on other parts of the body are co-existent with the disease under consideration, situated as before described. But on the other hand, the pimples of Strophulus are often, nay, generally, visible to some extent on the skin of other parts where the Thrush makes its appearance; which observation renders the identity, or, at least, close analogy of the two affections much more probable. As an argument, perhaps, it is of little importance to allege, that the causes of both, namely, improper feeding and derangement of the stomach, are the same, for, in truth, this assertion may be made of a large portion of the diseases forming the subjects of our notice.

The unimportant character of Thrush where it is not accompanied by diseased mesenteric glands, emaciation, or appearances of petechiæ and other marks of great debility, in the infant will excuse the following abbreviated descrip-

tion and notice of what has been recorded by different authors respecting its pathology and best methods of treatment.

The notice of the nurse is generally first attracted by apparent inability on the part of the infant to draw the milk in its usual satisfactory and contented manner, the effort being accompanied with more or less of pain and crying. The heat and irritation of the disease are soon communicated to the nipple of the mother, producing excoriation and excessive tenderness. On examining the infant's mouth, the lining of the cheeks, angles of the mouth, sides and dorsum of the tongue, have small white specks, more or less thickly distributed over them, and sometimes they are so closely set together, as to furnish a white incrustation down the centre of the tongue. The detached specks resemble and are occasionally mistaken for minute portions of curd, and these commonly separate earlier than in parts where the disease is more thickly distributed, leaving a florid and rather unhealthy-looking state of the part. If the original causes of the disease remain in operation, fresh crops of the minute specks are apt to occur, leading to much irritation and exhaustion, and sometimes considerable wasting of flesh.

Every thing which disorders the stomach and bowels, or reduces the strength of the system, is capable of producing Thrush. So that the habits and health of the nurse may be occasionally reasonably suspected, where no feeding by the hand is had recourse to, or where the latter has received an ordinary share of attention. An unhealthy atmosphere, want of cleanliness, and food in which a great quantity of sugar has been employed, and in the preparation and exhibition of which little attention is paid to consistence or quantity, are often noticed as its causes.

The duration of this affection depends on the degree of disorder of the general health, stomach, and bowels of the infant. If this be such as to admit of easy correction, the local disease lasts but two or three days, and does not become extensive; but if no alteration is made in these respects, it may continue much longer, and become a powerful cause of additional debility by the irritation and pain, and interference with the exhibition of nourishment attending it. Children brought up by hand are most subject to its severer forms, and when these are sickly and delicate, inattention to their food is often productive of serious forms of the disease; but there is no doubt that restriction as to quantity or

deterioration of the quality of the milk is equally capable of bringing it on.

Delicate females sometimes have their infants suffer considerably by persisting in suckling them, though assisted by what is supposed an adequate quantity of spoon victuals; but as soon as all attempts at suckling are forbidden, and the latter is entirely depended on for the nourishment of the child, the disease disappears, and the general health rapidly improves.

The kind of medicine most likely to do good in the treatment of Thrush is that which is most applicable to the constitutional condition of the patient. Mild alteratives are, in the majority of cases, all which are found necessary; an open and regular state of the bowels being of the greatest importance.

As an application, borax and honey seems to have obtained the preference to all others, and it is generally the only thing had recourse to locally in the management of the disease. Preparations of soda, indeed, have been long known as useful applications in subduing irritation of the membrane of the mouth and fauces, whether arising from excoriation or other causes*.

* A solution of chlorate of soda has lately been introduced to the notice of the profession by Dr. Darling, as

An idea generally prevails among nurses, that the eruption of Thrush extends through the whole alimentary canal, and hence they are accustomed to look on any irritation or redness about the anus as a sign of the termination of the disease; it being under these circumstances supposed to have finished its travels. There seems to be no reason to suppose, however, that it extends beyond the mouth and fauces in ordinary instances; the irritation about the anus being much more satisfactorily explained by reference to the irritation produced by diseased secretions.

An inconvenience of some importance is often sustained by the mother or nurse in suckling infants, during the progress of the disease, from the excoriation of the nipple before alluded to. The cause of this excoriation is generally understood to be the application of the diseased secretion of the tongue and lips of the infant to the part. It is probable that such affection might be entirely prevented, if the existence of Thrush in the infant could be sufficiently soon dis-

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possessed of extraordinary powers, not only in subduing irritation in the membrane of the mouth and fauces in ordinary cases, but of restraining or so modifying the action of the salivary glands when under the influence of mercury, as to render the situation of the patient much more comfortable than has been hitherto usual under such circumstances.

covered; as the simple application of a little warm water to the nipple, after each time that the child has been allowed to suck, would effectually dislodge the cause of the irritation.

The part of the nipple most frequently the seat of this disorder is its base: around which a ring of abraded and extremely tender cutis is generally discovered, sometimes assuming the character of a deep fissure, somewhat resembling those of Psoriasis. Extreme tenderness and pain are usually complained of, and if the abraded surface be minutely examined, it is often found covered by coagulable lymph. From the pressure of the dress, or covering of the part, when the affection has existed for a few days, and when a crack or fissure is produced, the sides of such fissure are brought into contact, and are partly glued together in the course of a few hours; and in such case, the pain, when the child is again applied, is extremely severe, the recently formed adhesion being forcibly torn through by its efforts in extending the nipple. This affection is so well understood to arise in the way described, as to render Dr. Bateman's advice in the treatment of Thrush, namely, to change the nurse, extremely difficult to be followed, even if an opportunity should occur of making such arrangement satisfactorily in

other respects; and in the majority of cases, it will be found by far the better plan to wean the child at once. It will be obvious that, even on the account of the latter, this plan ought to be preferred, because the effort of swallowing properly prepared spoon victuals would be much less painful to it than the attrition and muscular exertion of the affected parts in sucking. If suckling be continued also, it is impossible to have recourse to any applications likely to remove the pain and irritation of the affected nipple with safety, though the disease readily heals if a state of quietude of the part be enjoined, and applications of a sedative kind be had recourse to. Weak spirituous lotions, with a small quantity of ext. litharg. seem entitled to preference on some points; but the red precipitate ointment, very much diluted, is also used with great advantage.

The Aphtha Adultorum, as it has been termed by Dr. Bateman, is a different disease from the foregoing in many respects, though perhaps attributable, in a great number of cases, to the same causes. It is a distinctly vesicular disease, usually appearing on some of the same parts as the Thrush of infants, the edges of the tongue and the fauces being its most common situations. If the vesicles are

observed before the cuticle is ruptured, the fluid they contain is generally found more or less coloured with sanguineous discharge from the denuded cutis, greatly resembling that of the vesicles described in the chapters on Purpura, Pompholyx, &c.; but when they become broken, the collapsed cuticle exhibits a whitened appearance, and adheres to the affected surface, thus exhibiting some resemblance to Thrush. The diseased surface is exceedingly tender and irritable, and superficial sloughs, to which the cuticle becomes attached, are formed, which do not readily separate. A viscid, offensive discharge, which the patient has much difficulty in getting rid of, takes place, and seems to excite a great deal of nausea and vomiting, and further exhaustion of strength.

This affection is always found to have originated in low and debilitated states of system. The depressing effects of previous severe fevers, and in the lower classes of lying-in women, tedious labours, deficient nourishment, close and unhealthy apartments, are its usual concomitants; it is, indeed, both as regards its etiology and pathology, nearly allied to Purpura and the vesicles of scurvy; being often in the class of persons mentioned accompanied with the appearances of the latter

diseases, such as petechiæ and blue-coloured vesications, on other parts of the body: bleeding from the gums and inability to masticate, from the pain attending it, are also often found in the train.

The constitutional condition of the patient always requires the utmost attention in this disease. The local affection being properly understood to indicate a state of alarming debility, tonics and stimulants will be always necessary; and if the febrile symptoms afford no objection to the removal of the patient into a purer atmosphere, this step will be attended with great advantage. It is exceedingly difficult in many cases to give, by any plan of treatment, that energy and tone to the constitution which is necessary to bring on a healthy state of the diseased spots, either on the tongue or other parts. Weeks will, in some cases, pass away under the diligent employment of the plan of treatment alluded to, without a beneficial change in such respects, and local applications seem to have little or no effect. Under these circumstances, there does not seem to be sufficient energy of the constitution for the slightest natural attempt at reparation; and the white sloughy sore, found, perhaps, on the hands or feet, appears to undergo the process of exsiccation,

neither going forwards to, nor receding farther from, the healthy state, and no appearance of fluid secretion upon it occurring till death takes place.

Dr. Bateman has applied the term Aphtha Anginosa to a disease of which he gives the following account. "A species of sore throat, which is not unfrequently observed during damp and cold autumnal seasons, especially in women and children. It is preceded by slight febrile symptoms, which seldom continue many days. On the second or third day, a roughness and soreness are perceived in the throat, which, on inspection, is found to be tumid, especially the tonsils, uvula, and lower part of the velum pendulum, and considerably inflamed, but of a purplish-red colour. The same colour extends along the sides of the tongue, which is covered in the middle with a thin white crust, through which the elongated and inflamed papillæ protrude their red points. Small whitish specks form on these parts, which usually remain distinct, and heal in a few days, but occasionally coalesce, and produce patches of superficial ulceration. The complaint is sometimes continued three weeks or a month by successive appearances of the Aphthæ, but without any constitutional disturbance.

"This disease appears to arise from the influence of cold and moisture, unwholesome diet, and acrid effluvia taken into the lungs. In the latter mode, it is produced in persons who attend on patients affected with confluent small-pox, scarlatina anginosa, or other malignant fevers.

"Although there is no clear evidence of its propagation by contagion, it is frequently seen to attack several children in the same family, about the same time, or in very quick succession. There appears to be no danger in this affection, and medicine does not materially abbreviate its duration. A light diet, with diluent drinks, and gentle laxatives, where there is a disposition to inactivity in the bowels, constitute the only treatment required for its cure. Leeches and blisters seem to be rather detrimental than advantageous; and cinchona, with mineral acids, to be useless until the decline of the disorder, when they contribute to restore the strength."

CHAPTER XVIII.

OF PEMPHIGUS AND POMPHOLYX.

The existence of the disease termed Pemphigus, or, in other words, of fever of a specific character, marked by an eruption of vesicles containing a colourless, or light yellow fluid, has been doubted by the best authorities; nor have the learned researches of Willan, Bateman, and others, led to any other disclosure, than that such cutaneous affections have now and then occurred in low fevers. To the authorities quoted by these authors in elucidating this matter, may be added that of Rhases, who has described it as occurring under such circumstances. According to the latter, it shows itself in small bladders resembling burns, preceded by redness and itching, and terminates in ulcers covered by a dark brown crust. The name, however, has been handed down to us from the time of Sauvages; and within these few years several

cases so denominated have been recorded in periodical and other publications; but these may be seen, on attentive perusal, to be merely cases of Pompholyx, attended by accidental febrile symptoms. The character of the latter, under which the eruption has appeared, has been in some instances simple at first, and terminating in that of Typhus *: Drs. Porter †, Dickson ‡, and Bateman §, appear, however, to agree in the above opinion as to the absence of any direct connexion between the cutaneous affection and the fever attending it; and any allusion to the question of recent date, which I have been able to discover elsewhere, seems to afford some evidence or other of its correctness.

If the non-existence of the disease termed Pemphigus be admitted, some modification of the description of Pompholyx by Dr. Willan must necessarily be instituted, as it appears from this author that the latter consists of an "eruption of bullæ, without any inflammation around them, and without fever."

* Mr. Frogley's case, vol. xxxi. Med. and Phys. Journ.

† Edinb. Med. and Surg. Journ. vol. xv.

‡ Ibid. vol. ix.

§ Synopsis of Cutaneous Diseases.

In a very large proportion of the cases which have been recorded of this disease, some acceleration of pulse or other marks of general irritation have preceded it, while it is often appearing in protracted illnesses, and is then to be looked upon as a mark of the exhaustion produced. The term Pemphigus, from the union of these symptoms with the cutaneous affections, seems to have been often improperly applied.

When the appearance of the vesicles of Pompholyx is not preceded by severe indisposition, it is ushered in by languor, lassitude, and feelings of general debility. It usually first attracts the notice of the patient in the form of a small vesicle about the size of a pea, which in twenty-four hours becomes as large as a walnut, at which time it is commonly broken with the smallest degree of violence. Two or three of these may perhaps be seen at a time on different parts of the body, but their most frequent situation is on the lower extremities. Here and there a small red speck, evidently formed by the rupture of a minute vessel on the surface of the cutis, is discovered intermixed with these, which is to be considered the incipient state of the vesicle. The extravasation of blood is sometimes sufficiently great to

give the latter a bluish colour, precisely resembling the vesicle of scurvy described in a preceding page, when, its contents being let out, they assume a resemblance to bloody water. In other cases the fluid consists merely of yellowish serum*.

It does not appear to be confined to any particular class of individuals, but is, notwithstanding, much more frequently seen in young people of delicate constitutions, and accustomed to sedentary habits, than in others. If the disease is seen and properly treated at the commencement, it soon disappears; but if this has not been the case, "the bullæ continue to arise in succession on different parts of the body, and even re-appear on the parts first affected, in some cases for several weeks, so that the whole number of bullæ is very great, and when the excoriations are thus multiplied, a slight febrile paroxysm occurs every night, and the patient suffers much from the irritation, and from want of sleep." The character of the excoriation formed by the rupture of the vesicle depends entirely on the degree of constitutional derangement. Sometimes a new and sound skin covers the

* Both these appearances are well represented in the plate facing the title-page.

part in a day or two; in others, it is followed by a superficial sore, surrounded by a red border: while, when it occurs after fevers of debility, it becomes white, sloughy, tedious, and painful.

A state of the system or of internal organs seriously interrupting the process of chylification, and in which consequently the nutritive properties of the blood are much reduced, is as favourable to the production of Pompholyx, as of Scurvy and Purpura; and the analogy of the former to the latter is proved by the badly nourished state of the vessels of the cutis existing in it*, the slightest pressure being generally enough to break them down sufficiently to produce a bruise of the part.

These observations refer generally to Pompholyx, as it usually makes its appearance; but there are three instances recently recorded of its having shown itself in the form of an epidemic. In two of these the disease

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* When blisters are formed on the surface of the skin without previous inflammation, or evident acrimony, as the vesicles of some cases of Pemphigus may be looked upon to be, I am much disposed to imagine, that such arise either from a defect in the cuticle or atony of the extremities of the cutaneous vessels.—*Jackson's Dermato Pathologia.*

has been termed Pemphigus; but, for the reasons detailed, it has been thought proper to notice them here. In truth, the question as to the existence of the fever termed Pemphigus seems of so little practical importance, as to fully justify this line of proceeding.

The first instance is reported by M. Petiet, in the Journal de Medecin, in 1813. It appears, that out of 294 persons comprising the population of a village, thirty-five cases of the disease occurred. It made its appearance with symptoms of a slight febrile character, and itching in different parts of the body, which continued three days before the vesicles appeared. When the latter were broken, the excoriated cutis exhibited a violet brown colour. In some cases, the febrile symptoms approached the character of Typhus; but recovery took place in all cases under the use of refrigerant saline medicines.

The second, observed by Mr. Daniell, of Weldon, in Northamptonshire, in which neighbourhood it occurred*, approaches in similarity to the preceding. A number of hay-makers "were all severally attacked with

* Medical Repository, vol. vi. p. 277.

this disease in a more or less degree; some so lightly as not to require medical assistance, while others were so alarmingly affected as to excite apprehensions.

"The symptoms of its commencement were similar to a common attack of fever, attended with burning heat of the skin, which was only relieved by the appearance of the vesicle. In the several cases, the blister exhibited a puckered appearance, scarcely any becoming larger than the size of a nut. The progress to vesication was extremely rapid, and in the course of a few hours a thin *excoriating ichor* issued from them, exciting great inflammation, swelling, and uneasiness. The general symptoms were violent sickness, pain, or giddiness in the head, prostration of strength, lassitude and general anxiety, aching pain in the limbs, and frequent rigours."

It seems not improbable, that some vegetable poison, with the operation of which we are not at present acquainted, in its local application, may have exercised its influence in bringing on the disease in the cases above described, as the subjects of it had been employed away from the other part of the labourers in pulling docks. Such appears indeed to have been their own impression as conveyed to Mr. Daniell. The irritating

properties of the fluid of the vesicles, coupled with the exposure to the sun, under which they must have followed their occupation, would have warranted a suspicion, that the action of heat on the surface may have been the exciting cause; but the vesicles were alike extended over parts well protected by clothing, and those most exposed.

An emetic, followed by aperients and saline medicines, only seems to have been necessary to the cure.

In 1816, according to the editors of the London Medical Repository *, Pompholyx appeared as an epidemic at Chelsea, and extended several miles on each side the river.

Calomel, joined with other purgatives, and followed by light tonics, quickly brought about recovery.

The foregoing description of the disease given by Mr. Daniell and M. Petiet corresponds generally with those of Dr. Dickson and Dr. Porter †, varying only in the degree of severity of the symptoms. Dr. Porter observes, that in the case which he has detailed, the tunica conjunctiva was much inflamed, and the exposure to light caused a copious

* Vol. vi.

† Edinb. Med. and Surg. Journ. vols. x. xv.

flow of scalding tears. A similar observation is made in the first case detailed by Dr. Dickson; in two others on record also, similar inflammation has been observed.

Anxiety of mind has, in some cases, appeared to exercise considerable influence among the predisposing causes of Pompholyx * as well as of scurvy †; and where this has manifestly existed during the treatment, the cure has been much retarded.

The constitutional treatment adopted must, of course, be modified according to the existing symptoms. The character of the fever with which the disease is accompanied will influence it to a certain extent; but the general principle laid down for the management of Purpura, in the use of purgatives, is in all cases perfectly applicable here, whether accompanied by fever, or unattended by marks of great constitutional disorder. The same species of deranged biliary secretion, though not to so great an extent, has been generally

* Mr. Mayd's case, vol. ii. Med. Repos. The bladders in this contained a fluid resembling "water in which meat had been washed;" an appearance noticed in a preceding page.

† See the case of Charpentier, alluded to in the xiiith vol. of the above, the works of our early voyagers, &c.

noticed where the evacuations have been examined; but such derangement is removed with considerably less difficulty. When things are in a proper state in this respect, the febrile symptoms become mitigated, and the patient receives much benefit from the use of tonics.

The local treatment should consist of puncturing the vesicle as soon as it has attained such a size as to be in danger of being inadvertently broken, and protecting the collapsed cuticle from being rubbed off, or disturbed. Where the fluid which it contains is not acrid and irritating, this plan will not be followed by any bad effects; though in such instances as those of Mr. Daniell, which have been alluded to, it may perhaps be proper to have recourse to medicinal applications to the surface of the abraded cutis. The utility of the common warm bath is rather questionable; but the sulphur vapour bath has been in one instance found eminently useful.

The disease termed by Dr. Willan Pemphigus infantilis, and by Dr. Stokes* P. gangrenosus, wears the character of a very aggravated state of Pompholyx, with great debility and low fever. According to the former, it

* Med. and Phys. Journ. vol. xix.

"exhibits irregular oblong vesications, or phlyctænæ of a considerable size, and generally flattened at the top: they are at first small and transparent, but as they enlarge, the fluid contained in them assumes a purplish hue, and finally becomes turbid from a slight admixture of pus. They are also surrounded by an inflamed border of a livid red colour. This eruption sometimes appears in infants two or three days after birth, on the neck and upper part of the breast; on the abdomen, groin, scrotum, and inner parts of the thighs: it has been known, however, to have occurred so late as ten months after birth. When the fluid is discharged after the vesications break, the ulcerated surface is not disposed to heal, but spreads beyond its original boundary, and becomes extremely painful. As the vesications arise one after another in different places, and are all seconded by ulcerations; the disease continues with little remission for several days, generally till the patient expires under the complicated distress arising from pain, loss of sleep, and violent fever. The children thus affected are often weak and emaciated, with a dry shrivelled skin*."

* Willan on Cutaneous Diseases, p. 537.

In Ireland, according to Dr. Stokes, it is very commonly seen among the children of the lower class of the poor, and the part most particularly stated as its seat is the back of the ears, but it is by no means confined to this situation. "It occasionally prevails epidemically, and is then preceded by a livid suffusion, slightly elevated above the surrounding parts. In the progress of the disorder, the ulcers enlarge rapidly, are attended with remarkable fœtor, very great discharge, and livid edges; and if they are situated behind the ears, they destroy the connexion of the posterior cartilage, with the cranium, spread to the meatus auditorius, to the eyes, (the sight of which seemed, in a few cases, to have been destroyed one or two days before death), and sometimes to the vertex." Great constitutional irritation is produced soon after the vesicles burst; the energies of the system rapidly decline; death takes place about the tenth or twelfth day, and is often preceded by convulsions.

The period at which the disease usually makes its appearance is, according to Dr. Stokes's information, from the third month to the ninth year; while Dr. Willan describes it to be limited to the first year. This variation, however, may be perhaps explained by the

difference in the habits of the people, and in the quality of their food.

The frequently fatal termination of the disease witnessed by Dr. Stokes under ordinary professional management, determined him to have recourse to the recipe of a female reported to be possessed of a nostrum of great efficacy in its treatment. The preparation in question was a green vegetable ointment composed of a farrago of different plants; it had been used with much success by the country people, and the inquiry set on foot by Dr. S. induced him to think that it was indebted for its virtues to the *scrophularia nodosa*, or great figwort, which formed a part of its composition. An ointment, therefore, made entirely of the latter, was subsequently employed, and was directed to be made use of, preceded by a poultice of oatmeal and porter; the latter to have remained on eight hours before the first application of the ointment. "It should be as highly saturated with the green vegetable matter as possible, and when applied it should be melted, and suffered to cool to the consistence of honey; it should be applied with a soft feather, and with the utmost gentleness to the whole surface of the sore." The internal use of yeast is recommended by Dr. S. in conjunction

with the above; and he concludes his observations by remarking, that this plan of treatment is decidedly superior to any constituted of the applications usually had recourse to on common surgical principles.

CHAPTER XIX.

ON ECTHYMA AND RUPIA.

Five species of Ecthyma, all of which occur under the same states of constitution, have originated with the classification of Dr. Willan, and four of them are beautifully represented in Dr. Bateman's 43d and 44th plates.

The general description is as follows: "An eruption of the inflamed pustules, termed Phlyzacia *, usually distinct, and arising at a distance from each other. It is commonly indicative of some state of distress under which the constitution labours, and though it is not attended with actual fever, yet a degree of general irritation or erethism is often present with it."

According to our predecessors so often

* A pustule, commonly of a large size, raised on a hard circular base of a vivid red colour, and succeeded by a thick, hard, dark coloured scab.

quoted, there are four forms of this disease: 1. E. vulgare; 2. E. Infantile; 3. E. luridum; 4. E. cachecticum. These varieties are, however, the mere results of different degrees of debility of constitution, or irritability of the skin of the individual; the whole of them are distinctly marked by want of energy in the cutaneous vessels as well as of the system at large. Occasionally the eruption is confined to the trunk, but sometimes extends hence to other parts. It is, however, seldom seen on the face or hands. When occurring in infants, it is usually in conjunction with an erythematous redness of the skin, particularly observed about the nates, but which also frequently occupies the interstices of the spots elsewhere.

Alibert, who usually finished his various observations on particular diseases with the copious relation of cases, records several under the head of Lepre crustacee, which appear to resemble in all points what we should here denominate Ecthyma, or Rupia. The subjects of the different cases mentioned by him evidently resemble, as regards the condition of their general health, those which have been described as most liable to these diseases here.

Anxiety of mind, accompanied by great

bodily exertion, fatigue, low living, the debilitating effects of previous fever, in short, any thing reducing the energies of the constitution beyond a certain extent is capable of producing it, and it is clearly dependent on a similar state of the vessels of the skin to that giving rise to the formation of Petechiæ.

Almost the whole of the cases which I have had an opportunity of observing have occurred in young people; the majority in young men, who, with constitutions originally not of the strongest class, had imprudently indulged in excesses and irregularities to a very great extent, accompanied by privation of rest and other depressing circumstances. Very frequently in such cases it is mistaken for a venereal eruption, and the patient himself is readily made to believe in an opinion which his habits have made so probable. If mercury be had recourse to under these circumstances, the disease is much aggravated, the dried scabs of which it is constituted grow on the part rapidly, becoming of a dark brown colour, exceedingly hard, and of a conical form, presenting, in fact, on a minute scale, the characters of the disease termed Rupia.

Measles, scarlatina, and many other diseases followed by debility, occasionally prove

exciting causes of Ecthyma, in which case the patient, instead of rapidly regaining his strength, is visited simultaneously with the appearance of the eruption, with that restlessness and hurried pulse before alluded to. This state of things, in a trifling degree, sometimes exists for days after the original febrile affection has disappeared, without attracting much attention; and if the appetite of the patient is not impaired, eventually goes off, leaving him in good health. Now and then, however, instead of gaining strength, they lose flesh, pass restless nights, become exceedingly languid, subject to regular attacks of hectic fever; and exhibit a countenance of much anxiety and distress.

When the disease makes its appearance in consequence of an increased degree of debility brought on by any eruptive fever, as measles, &c., it is usually seen in its very earliest stage about the waist. It exhibits a few reddened and slightly elevated spots, covered with a very thin lamina of cuticle, which readily separates. Some of these have a minute elevation in their centre resembling a vesicle: the latter, however, contains nothing like the serum of the herpetic vesicle, but a glutinous fluid, which dries upon the part, and forms with the morbid cuticle an

elevated scab of a conical form, the basis of which in a day or two is surrounded by a small inflamed areola. The surface of this areola is soon covered with a lamellated scab, and a scale of considerable magnitude is thus formed. During the continuance of the disease, many of these scabs separate; and if the strength is improved, the part beneath returns to a healthy state. Now and then, however, this process is repeated several times, and successive exfoliations continue to be produced.

The minute examination on which the foregoing description of the spots of Ecthyma is founded, has led me to think that the term pustule is very improperly applied to them. Taking into consideration the state of system existing in all cases as its predisponent cause, it would appear that an active inflammatory and suppurative action on the surface of the body is, of all events, one least to be expected to constitute the essence of the disease, and, accordingly, the kind of examination alluded to discloses a state of vessels materially differing from such an action. I have little doubt that in the formation of every spot of Ecthyma lesion of some minute vessel takes place, and that a kind of Petechiæ are thus produced. From some cause or other either

depending on a minor degree of debility of system to that in which the Petechiæ remain quiescent, or on mere additional irritability of skin, attempts to repair the mischief are made by the vessels of the part, and inflammatory action takes place. A minute vessel thus ruptured has its extravasated contents mixed with the coagulable lymph poured out by the vessels labouring to repair the mischief, and the mixed fluids dry on the spot, forming the minuter scabs. The powers of the constitution being unequal to the carrying this process through in an healthy manner, irregular attempts at suppuration take place, and the bulk of the scab is usually surrounded by, and partly mixed with a minute portion of ill-formed pus; even this, however, dries on the part, and increases the bulk of the scab. Many of the minute vessels concerned in this process are in too relaxed a state for the occasion, and their secretion is mixed with, and deeply coloured by, red globules of the blood which escape under the increased action.

The scab itself now becomes a cause of irritation to the surface on which its basis rests, the bloody purulent secretion increases, becomes inspissated, and attached to the mass: the ulcerative process gradually destroys the

surrounding cutis, and the margin of the sound skin becomes elevated and thickened. The scab, by the continuance of this process, is gradually elevated, and rapidly enlarges; a fresh and broader ring of growth being added to its base every three or four days.

At this period it answers to the description of Rupia. This latter named affection, though described by Dr. Bateman, as originating always in a vesicular form, has been satisfactorily ascertained to be the termination of Ecthyma in a variety of cases which have come under my notice when neglected or improperly treated: in ordinary instances, the state of system on which the latter depends being gradually removed by quietude, tonics, good living, and abstinence from any species of indulgence followed by exhaustion, the scabs do not assume the decided regular conical form.

From the description of Dr. Bateman, it would appear that even when Rupia assumes the form of an inflamed vesicle at its commencement, the subsequent formation of the hard dark-coloured scab is still accomplished in the manner above described. The same states of constitution and conditions of vessels of the surface exist in the two cases, and the exudation of lymph from the debilitated ves-

sels in forming the vesicle appears to excite attempts at inflammation in those adjoining, in the same way as noticed in the commencement of the scab of Ecthyma.

The occasional dark colour of the scab in both cases had appeared to me to be produced by a mixture of blood with the coagulable lymph and other secretion constituting its substance, and I am now enabled by inquiry to state this to be the fact. When the scales of Ecthyma are rubbed off in a rude manner, and the skin is abraded on which they were situated, a little blood escapes, but the same kind of secretion continues mixed with the blood, and the scale is harder, considerably darker coloured, and irregular: the formation of an ulcerated sore rarely follows such an accident.

Ecthyma, where the spots are very small and much diffused, is sometimes mistaken for itch. I have lately met with a case of this kind where sulphur had been used both internally and externally: the external application, however, did not aggravate the cutaneous affection, though it did not improve it. The patient rapidly recovered by the use of tonics and sea bathing. With respect to the propriety and value of the latter as a remedy, it may be as well to add, that in several other

cases it has produced a manifestly beneficial effect, and I am induced to think that it may be had recourse to in all with great safety and infinite advantage. It appears to afford that kind of stimulus to the cutaneous vessels which is desirable, as well as to act as a tonic to the system generally. Indeed it would seem at first sight obviously indicated, if the pathology of the disease, which I have endeavoured to give, be correct.

As far as I am able to learn, the enlarged, blackened, and prominent scabs of Rupia are never seen but in the lower classes of society, where long protracted disease has produced a general wasting of the body, hectic fever, and other symptoms of the lowest degree of debility. In the cases of this kind answering to the Rupia prominens, which have come under my notice in the St. Giles's Infirmary, the patients have been not unfrequently the subjects of syphilis. In one instance of recent occurrence, the patient had severe pains in his head and limbs, on which account he had lately been considered to require mercury. Under the influence of this medicine he grew worse, and the scabs rapidly enlarged—he discontinued it, and was allowed meat, wine, porter, and tonics, and rapidly recovered. In the debilitated state of this patient, and before the

constitution had began to rally, I was induced to apply a strap of adhesive plaster upon the largest of the scabs, and to employ a little pressure, with a view of hastening its separation and preserving it: but on removing the bandage, the surface of the skin and base of the scab were found attached to each other by a stringy slough, which never separated till the constitution was greatly improved. I had been more successful in a former instance of this kind, and by dissolving the incrustation in warm water, ascertained that its substance was largely made up of blood, which had undergone the process of exsiccation with the other fluid secretion. When the slough is removed from the surface of the sore, the latter exhibits a glassy inactive surface for some time, and the ulceration is usually found to have extended deep into the cellular membrane of the part. The growth of healthy granulations in such a case will be materially expedited by the use of the nitrous acid lotion; a pledget of lint wetted in this should be kept constantly applied, so as to fill the excavation.

Local applications in a disease so markedly dependent on debility of system are seldom called for or productive of benefit, except in cases similar to that above alluded to, where the constitution is improving, the scab de-

tached, and the sore on which it rested beginning to assume a healthy action; generally nothing is to be expected from them beyond the temporary alleviation of uneasiness.

In the constitutional management, it will be first necessary to correct the state of the secretions, as these will generally be found considerably vitiated and discoloured. Gentle purgatives, and an occasional dose of some mild mercurial alterative, will be found necessary; but a state of rest, relaxation from business, and tonics, are generally also required; and in the employment of these, a sufficient guide will be obtained, from the consideration of the circumstances of the patient, and the history of the disease.

CHAPTER XX.

ERYTHEMA NODOSUM.

The erythema nodosum is a singular disease, and in its character nearly allied to those cases of purpura which occur in apparently healthy states of system, the pathology of which I have endeavoured to investigate in a former page; hence it finds its place here. The same high degree of derangement of the secretions, and disordered state of those organs in which the process of chylification is carried on, has been noticed in repeated instances where the disease has come under my observation.

The inflammation appears "on the fore part of the legs, and is preceded by slight febrile symptoms for several days. It shows itself in large oval patches, the long diameter of which is parallel with the tibia; these slowly rise into hard and painful protuberances, and as regularly soften and subside in the course of eight or nine days, the red colour turning blue, as if the leg had been bruised."

I have seen the erythema nodosum in children, as well as in grown persons, equally distinctly attended with, and dependent on, the disorder mentioned. In a recent instance, two children who had been placed out at nurse were the subjects of it; the febrile irritation had been pretty severe, and the cutaneous disorder had appeared in the second two or three days after it was discovered in the first. In both cases, after the redness began to die away, a tuberculous hardness and thickening of the cutis and cellular membrane continued for many days, evidently produced by sanguineous effusion into the cellular membrane, during the continuance of the inflammatory action. These cases gave rise, at the commencement, to the suspicion of contagion; but the similarity of the manner of feeding the two children, with that of the history of the previous state of their bowels, cleared up the question. They both rapidly recovered under the free use of purgatives of calomel and jalap, but the blue spots were some weeks in disappearing.

In debilitated states of system in the adults it sometimes takes place, accompanied by those deep-seated pains which have been described as appertaining to Purpura, and when the cutaneous affection is seated contiguous

to the tibia, considerable pain is referred to this bone, which continues till the redness disappears, and then gradually ceases. Under these circumstances it somewhat resembles the syphilitic node, and has been occasionally mistaken for it A little inquiry into the history of the case, however, if aided by an attentive examination of the parts, will always be sufficient to guard us against such an error.

SECTION VI.

Fungoid Diseases of the Cutis and Cuticle.

CHAPTER XXI.

Ichthyosis, or the fish-skin disease, and warts, constitute the more important parts of this section.

Ichthyosis usually makes its first appearance in a form unequivocally showing its origin in a chronic inflammatory action of the vessels producing the cuticle. A morbid thickening, with a dry and harsh state of this covering, is the first circumstance worthy of observation in the disease. The patient rarely complains of any uneasy sensation at first, but as the thickening of the cuticle increases, a distinct sensation of increased heat is felt, and some marks of irritation and redness are observed on the healthy cutis round the margin of the diseased spot. In the course of a short time the diseased cutis rises above the surrounding parts, and its surface begins to exhibit the appearances of minute and innumerable fissures, which, after a short time, become elongated and extensive cracks,

intersecting each other, and dividing the surface into innumerable portions, each of which, individually considered, exhibits great similarity in structure to the common wart. When the growth of the diseased structure has attained the height at which roughness of its surface and the minute fissures described occur, it assumes a dusky and dark-brown colour, which colour, as the morbid parts continue to grow, gradually approaches blackness. This appearance, however, does not naturally belong to the disease, but is given to it by the entanglement of dirt, from which it is impossible to protect it, on account of its peculiarity of structure, even though frequent ablutions are had recourse to.

The idea of its analogy in formation and appearance to the skin of any kind of fish, from which it derives its name, is evidently erroneous; the dry, hard cuticle of the elephant, and some other animals of the larger class, whose skins are not plentifully covered by hair, present a much nearer resemblance; in point of fact, however, it is a formation which is not analogous to any thing that is often seen but the common wart of old standing, and even this resemblance exists only in structure, the connexion of the latter with the cutis being considerably closer, and its separation effected with much more dif-

ficulty and pain. The sensation on drawing the finger along the diseased surface is precisely similar to that occurring from this proceeding on the surface of the larger and old standing warts.

The arms and legs are the most common situations of Ichthyosis: its occurrence on the face, as represented in the 18th plate of Dr. Bateman, is, comparatively, exceedingly rare. Whatever may be its situation, its causes seem to be equally obscure. It has not appeared, in any instance which I have witnessed, to be dependent on, or in any way connected with, constitutional derangement, nor has any cause of local irritation been discovered to have existed before the disease appeared in any one instance.

There are several instances of this deformity recorded, where hereditary origin has been distinctly traced. Dr. Girdlestone * and Mr. Martin † have both furnished cases of this kind to periodical publications, where the disease extended over the greater part of the body. In the cases reported by the first of these gentlemen, the father and grandfather

* Med. and Physical Journal, vol. 8.

† Vol. 9, of Medico-Chirurgical Transactions.

of the patient had been subject to it; and in those by Mr. Martin, a mother and child, it having made its appearance as early as three months after birth in both, and ultimately extended over every part of the body, except the head and neck. Dr. G. observed an usually florid complexion prevailing in the family whose cases form the subject of his report.

When the disease occurs under such circumstances, it is more than probable that medicinal treatment of every kind will fail to produce any alteration, depending as it does on the original formation of the skin. When only local, and of small extent, remedial measures may be taken with a fair prospect of success. In those cases, however, which I have had an opportunity of observing, no benefit has been derived, either by the use of pitch or arsenic, both of which have been spoken of as occasionally productive of benefit. Neither has any good resulted from the use of ointments. The frequent soaking of the parts in warm water, and gradually picking off the excrescence, as recommended by Willan and Bateman, will scarcely be practicable, even in cases of the most limited extent; and if effected, does not at all diminish the morbid disposition in the vessels of the part.

I have had two opportunies recently of submitting this disease to the combined influence of pressure and the cold lotion. Both these were situated on the leg, and as no disorder of the system or digestive organs could be traced, internal medicines were not had recourse to. Considering inordinate action of the vessels on the surface to be manifested both by the heat which was present, and the rapid growth of the excrescence, it appeared that the *modus operandi* of these measures was well adapted to the cases. Adhesive straps were applied as tightly as could be borne with comfort over the whole of the diseased part, extending a little above and below it, and these were supported by a bandage. The latter was kept constantly wetted with the lotion, and at the end of four or five days removed. At this period, the excrescence was found liberated from its attachment to the cutis, and came off in large pieces nearly through its whole extent, exposing a white and ill-formed cuticle, which might be scraped off in great quantities without pain. By perseverance in the same plan of treatment, the cuticle gradually assumed a strong and healthy state, and a complete cure was in both cases ultimately effected.

In a case of that form of Elephantiasis

termed the Barbadoes leg, some time since in St. George's Hospital, the cutis, particularly on the superior part, was covered by the same dry, dark-coloured excrescence, which belong to the older standing cases of Ichthyosis. It is very correctly represented in a drawing of the case made by my friend Mr. Gaskoin, and is, I understand, constantly observed, more or less extensively, in every instance of this disease. The case in question was, I believe, materially benefited by the diligent and scientific application of pressure by means of bandages.

Of what has been termed Ichthyosis cornea, it may be unnecessary to say much here. I am not aware that any light has been thrown on the subject of its pathology since the publication of Bateman's Synopsis. Of horny excrescences arising from the skin, there are a great number of instances recorded. Their removal seems to be a simple operation, not followed by any bad consequences.

A long list of references to cases and descriptions has been given by Dr. Bateman *, which the curious reader may be gratified in consulting.

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* Synopsis, p. 54.

OF WARTS.

Warts appear to be produced by disordered action in a congeries of vessels on the surface of the cutis, commonly originating from the irritation of substances which insinuate themselves into, and, perhaps, sometimes through the substance of the cuticle. Their structure and formation are almost too well known to require description; it is, however, evidently resembling the cuticle, and may be considered an irregular fungous production of this covering. It is said by some surgical writers, that they are readily and easily destroyed by stimulants or caustics. This is true as regards those occurring on parts covered by an extremely delicate cuticle, as the glans penis, &c. a very slight degree of excitement only being necessary to their destruction in these situations; but when they occur on the hands, the most expeditious mode is as follows: A small portion of the Emplas. Lyttæ is to be laid on the crown of the wart, and retained in this situation by adhesive plaster: in a day or two the substance of the wart is in a soft and moistened state, and a little ring of vesication appears round its base. In this con-

dition the greater part of the wart may be picked or sliced off; and if this be done, so as to bring it down to a level with the surrounding skin, the application of a little caustic will generally be all that is necessary.

Venereal warts, as they have been termed by English authors (the végétations syphilitiques of Alibert and Rayer), yield with less trouble to milder escharotics; a fact which is satisfactorily referrible to the inferior solidity of structure consequent on their rapid growth.

CHAPTER XXII.

CONCLUDING REMARKS.

Among the affections which do not come under the heads of the foregoing sections, are the varieties of Erythema and Roseola. With respect to the former of these, though the variations in figures of the inflamed surface have given foundation for distinctive designations in the classification of Dr. Willan *, it may be fearlessly stated, that it is of no independent importance (except as regards the last, or E. nodosum), and for the most part merely entitled to notice as symptomatic of derangement of the digestive organs. This admission indeed is distinctly made in the observations appended to the description of each of the variations alluded to both by Willan and Bateman.

* 1 E. fugax, 2 læve, 3 marginatum, 4 papulatum, 5 tuberculatum, 6 nodosum.

The symptomatic inflammation of the skin would be much better understood in the form of a general description. Such description would be divested of that multiplicity of terms which has been so conducive to confusion and intricacy in the works of the authors last mentioned, and it may be effected in a very few words, so as to answer all practical purposes.

The affection in question, whatever may be the form (with the above exception) which it may assume, whether consisting of red patches of an irregular form and short duration; whether with a smooth shining surface, or having papulæ distributed on it; whether with an irregular and defined margin, without elevation, or in the form of slightly elevated tubercles; requires no external applications, nor can be with propriety interfered with, except through the medium of the constitution.

On the subject of Roseola, what has been written may be summed up in a few words. Like simple Erythema, it is generally found dependent on some disorder of system, and is to be considered as an effort of nature to mitigate or prevent more important internal disorder.

By Roseola is meant "a rose-coloured efflorescence, variously figured, without wheals or papulæ, not contagious, sometimes accompanied by sensations of tingling and itching." It is distributed on the face, neck, and upper extremities, when only partial, rather more frequently than on other parts, but sometimes spreads over the greater portion of the cutaneous surface. If symptoms of febrile irritation, as is sometimes the case, usher in the efflorescence, such symptoms are mitigated by it, and eventually die away as the redness subsides. The rose-colour, from which it takes its name, is not that in which it appears at first, but seems rather to be the result of diminished inflammation: as the form in which it is at first observed is of a much brighter red. Sometimes, like Erythema, the redness is diffused; at others, it assumes the forms of rings and spots; while in others again, irregular lines of a darker colour have their interstices filled up by a lighter shade of red. These variations have been represented in the plates of Dr. Willan, under distinguishing appellations.

Rose-coloured rashes seem to be peculiar to no age or sex, but are, on the whole, more frequent among infants and children than others. Preternatural irritability of skin,

with a similar state of constitution, lead to its frequent appearance, in some from the most trifling exciting causes.

The colouring of the plates of Dr. Willan and Dr. Bateman is, in some copies which I have seen, so deficient, as to present no variation of shade between this affection and Scarlatina; but the distinction between the two diseases is very considerable, and essentially depends on this point. A due consideration of the co-existent symptoms will enable us to clear up any doubts which may arise.

As in Erythema, no local treatment is generally found necessary; but in such case as that inserted by Dr. Willan, communicated by Dr. Currie, of Chester*, where the disease returned annually, and continued from March to October, it would become a matter of necessary consideration.

When the rash appears in connexion with the variolous and vaccine disease, it has been named by Dr. Willan accordingly. It is generally supposed, under such circumstances, that the more important disorder is rendered milder by it.

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* Willan on Cutaneous Diseases, page 488.

Venereal eruptions, or those diseases of the skin which are produced by the poison of syphilis, have been recently pronounced to assume no other form than that of scales; the advocates of this doctrine having discovered that the papular or pustular eruptions heretofore appearing under circumstances of suspicion, and characterised as syphilitic, only make their appearance in connexion with, or subsequent to, sores not entitled to such character, or to simple gonorrhœa. Mr. Carmichael, whose opportunities of observation have been of no ordinary kind, has supported this opinion with facts and remarks; which, from the immense importance of the question, ought to be duly weighed and examined by every medical practitioner who has the interest of the profession and of society at heart.

According to Mr. C., the true syphilitic chancre or bubo is fòllowed, as a secondary symptom, by Lepra or Psoriasis. The line of distinction between these two affections, even when dependent on other causes, is sufficiently indistinct, and when occurring from syphilis, probably still more so; hence the propriety of the general designation proposed of "*scaly venereal disease*" is obvious. The following

description from the pages of Dr. Willan is that of the diseases in question. "Circular patches, which resemble those of the Lepra nigricans in size and colour, but which are not incrusted. The dryness and harshness of the skin, so remarkable in the Lepra vulgaris and alphoides, do not occur in the venereal Lepra; its patches, when somewhat advanced, being as soft and pliable as other parts of the skin. It is, however, proper to observe, that every patch originates from a small, hard, reddish protuberance. As this gradually dilates, the increase of its circumference is not attended with an increasing elevation at the centre: on the contrary, the sides of the patch are sometimes raised, and the central part of it appears a flat surface covered with thin white scales. The patches are generally distinct, and at a distance from each other: I have seldom seen any of them exceeding the size of a shilling; yet it is probable they might acquire a greater magnitude, if the progress of the disease were not early arrested by the use of mercury. When the constitution is under the full influence of this remedy, the sides of the patch shrink and become paler; the centre is also depressed, but the desquamation proceeds slowly; and the disease cannot be removed without a per-

severance in the course for six or eight weeks. A circular red spot usually appears for some time in the place of every declining patch, and a minute shallow depression, like a cicatrix, is left at the centre; but no permanent discoloration of the skin remains, as in some other cases. The leprous form of the syphilis takes place, like other venereal eruptions, at very different periods after infection in different cases. If no medicines were employed, it would at length terminate in ulcerated blotches."

The description of the syphilitic Psoriasis, page 153 of the same author, is as follows: "An eruption which very much resembles the Psoriasis guttata, differing from it only by a slighter degree of scaliness, and by the livid red, or dark rose-colour of the patches. The patches vary in their extent, from the size of a silver penny, to that of a section of a pea, but they are not circular. They rise at first very little, if at all, above the cuticle: as soon, however, as the scales appear on them, they become sensibly elevated, and sometimes the edge or circumference of the patch is higher than the little scales in its centre. This eruption is usually seen upon the forehead and breast, between the shoulders, or in the inside of the fore-arms, in the groins, about

the inside of the thighs, and upon the skin covering the lower part of the abdomen."

Mr. Carmichael considers the above description of the "scaly venereal disease," or that cutaneous affection exclusively produced by the syphilitic virus, as correct in all its parts, and that all papular or pustular eruptions are connected with other primary diseases not venereal. Thus, to a simple primary ulcer, excoriation of the glans, and gonorrhœa, he attributes the eruptions of pimples, which are attended by fever, and terminate in desquamation. When the ulcer has elevated edges, though it be not indurated, phlyzacious pustules occur, preceded by fever, and terminating in ulcers covered with thick crusts, which heal from their margin, and when the disease is on the wane, terminate in red and scaly blotches. When the primary ulcer has worn a decidedly phagedenic character, the cutaneous disease is at first tubercular, the tubercles being sometimes intermixed with spots approaching to pustules. Fever also accompanies this form of disease: many of the tubercles or pustules terminate in ulcers covered with a thick crust, which, if undisturbed, grows on the part, and assumes a conical form, its basis being surrounded with a thick phagedenic edge, pro-

ducing precisely the appearances of what has been named Rupia.

There have been several dissentient voices raised against Mr. Carmichael's opinions as above detailed, regarding both the exclusive claim of the scaly eruption to syphilitic origin, and the directness of the connexion of the papular and pustular diseases with the primary sores and affections which he has described. On the first of these points the weight of evidence is decidedly in favour of his doctrine; but some doubts may, I think, be reasonably entertained, whether a cachetic state of system may not be the sole cause of some of the eruptions he has described as connected with non-syphilitic primary disease.

The phlyzacious pustule, more particularly, seems liable to this suspicion, inasmuch as it is the form which cutaneous disease often assumes where nothing but reduced energy of system exists.

The treatment of these affections is included in the general management of other symptoms of the constitutional disorder which do not form the proper objects for consideration here.

In the chapters on Porrigo, I have omitted the consideration of an affection so designated by Willan and Bateman, from the utter absence of any thing like disease of the cutis in any part of its progress. The affection to which I allude is distinguished by the authors in question by the name of Porrigo decalvans.

No vestige of disease is ever discoverable in this affection in the cutis of the head. The hair gradually falls off without any obvious cause, leaving spots, which exhibit a pale and shining appearance. These are perfectly divested of hair; and if the surrounding parts on which the latter is growing be shaved, they are discovered to form distinct indentations.

Pathologically speaking, the dropping off of the hair is nothing more in this affection than the result of a particular organic structure ceasing to perform its office. In the preliminary remarks to this treatise, I have endeavoured to describe the structure in question, the office of which is to secrete and nourish the hair. The falling off of the hair is the consequence of the wasting away of this structure; and though the causes of the latter are not easily ascertained when occurring in young people in a good state of

health, they are sufficiently obvious in opposite states of system, and in old age, the phenomena occurring over the whole scalp in states of great exhaustion and debility from disease in youth where general reduction of fat has been temporarily produced, and in old age, from the general removal of this substance from superficial to internal parts, a change which is much favoured by the diminished energy of circulation which comes on at this period of life.

The similarity of figure which the affected spots assume to the contagious ringworm, often leads to the confounding the affection with the latter disease. It may, however, be distinguished by the absence of redness or irritation, and by the indented appearance described.

Dr. Bateman appears to have suspected the identity of the two affections, and Dr. Willan had seen a case or two in a school where the P. scutulata prevailed very generally; but it is evident, from the preceding description, that the only point in which similarity exists is of little or no importance.

When the hair falls off in patches, in the manner described, in children and young people, it often grows again in time as strong as ever; but I do not believe this can be brought

about, or at all expedited by any artificial means. I have seen two instances in adults, where the whole of the hair dropped off in a few weeks from the scalp, eyebrows, eyelids, &c., while the individuals were suffering from great grief and ill health. In one of these an endless variety of stimulant applications had been tried, with the hope of making the hair grow, but without the slightest effect. Indeed, I should be inclined to think, that if any effect at all was produced by this plan, it would be rather that of retarding than expediting the object.

THE END.

